This dissertation has been
microfilmed exactly as received 67-15,600

CAHOON, Margaret Cecelia, 1916-
THE DEVELOPMENT OF EMPIRICAL GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMS IN CANADA.

The University of Michigan, Ph.D., 1967
Education, administration

University Microfilms, Inc., Ann Arbor, Michigan

THE DEVELOPMENT OF EMPIRICAL GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMS IN CANADA

by

Margaret Cecelia Cahoon

A dissertation submitted in partial fulfillment
of the requirements for the degree
Doctor of Philosophy in the
University of Michigan
1967

Doctoral Committee:
Professor Mabel E. Rugen, Chairman
Assistant Professor Frank M. Andrews
Associate Professor Robert A. Bowman
Professor Daniel H. Cooper
Professor Stanley E. Dimond
Assistant Professor Patricia A. O'Connor

Abstract

THE DEVELOPMENT OF EMPIRICAL GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMS IN CANADA

By Margaret Cecelia Cahoon

The primary purpose of this study was to initiate the development of a self-appraisal instrument for the evaluation of the school health program through a synthesis of the concepts and constructs in authoritative literature with the judgments of selected leaders in education and public health on their applicability. A secondary purpose was to determine the influence of the type of preparation, the length of experience, and the range of involvement of the respondents in the selected leadership activities in the extent of the relative agreements in their judgments on applicability.

Guiding principles and criteria were formulated from Canadian, British and American literature, and used as the basis of an interview schedule-questionnaire instrument for the collection of the data. Judgments were sought from a population of leaders in Canadian education and public health who were involved in at least one of: research, publication, committee work, and teaching. The data were collected by interview and by questionnaire.

The major independent variable was the profession of the respondents. Type of preparation, length of experience, and range of involvement of the respondents were the other independent variables. The dependent variables

were the judgments of the respondents on a three-point scale of applicability.

The data were analyzed for the endorsement of each guiding principle and each criterion as indicated by the "definitely applicable" judgments of at least 75 per cent of the respondents in both education and public health.

The relative agreements between the respondents on the basis of profession, type of preparation, length of experience, and range of involvement were determined for 26 groups of related criteria. Three types of measures were used: (1) the difference in percentage between the judgments of the groups of respondents on each guiding principle and criterion, the average difference for a group of related criteria, and the average of the average differences for related groups of criteria; (2) Kendall's tau to show the similarity in rank order of the "definitely applicable" judgments when the average difference was at least 8 per cent; and (3) the proportion of the criteria within a group of criteria judged higher by one group of respondents than by another group to show which groups of respondents made higher judgments and which made lower judgments on particular groups of criteria.

All of the guiding principles and about three-fifths of the 335 criteria were endorsed by both professional groups. Thirty-eight criteria were endorsed by the public health workers but not by the educators, 22 were endorsed by the educators but not by the public health workers, and 72 criteria were not endorsed by either professional group.

Relatively low agreements between the judgments of the respondents

according to profession were evident on the criteria for dental health services, for attention to individual health differences of pupils, and for coordination with family medical and dental supervision, and for communications with others. On the remaining criteria there were relatively moderate to high agreements.

The evidence supported the following conclusions: the endorsed guiding principles and criteria are ready for testing; the relatively moderate to high agreements on certain groups of criteria provide a foundation for planning; the criteria in the areas in which there were relatively low agreements should be the focus for further study; the tentative hypotheses about the nature of the judgments of the dual preparation group, the under-10-year experience group, and the multiple involvement group should be tested.

This study has implications for professional preparation and continuing education in school health and health education, and for a self-appraisal instrument for use in school health programs in Canada.

ACKNOWLEDGMENTS

Particular gratitude is extended to Professor Mabel E. Rugen for her encouragement, stimulation, and guidance in the planning and conduct of this study. Sincere appreciation is directed to Professor Frank M. Andrews for his patient counsel in the selection and use of the survey and statistical methods. Genuine thanks are expressed to the other members of this committee, Professors Robert A. Bowman, Daniel H. Cooper, Stanley E. Dimond, and Patricia A. O'Connor, for their sustained encouragement.

Special indebtedness is acknowledged to Dr. A.J. Rhodes, Dr. M.H. Brown, and Dr. W. Mosley for their generosity and guidance, and for the sponsorship of this study by the Department of Public Health of the School of Hygiene, University of Toronto, and to Dr. E.R. Langford who took on many of the writer's teaching responsibilities during the period of this study. Appreciation is conveyed to all of the writer's other colleagues in the School of Hygiene and the School of Nursing, University of Toronto, and in the East York-Leaside Health Unit.

All of the participants in this study deserve sincere thanks for their interest, and for the thoroughness with which they provided the data. Appreciation is expressed also to those who gave consultation

in the planning of this study but who are no longer in active leadership positions in school health.

A special acknowledgment is made to World Health Organization for the Fellowship for graduate study which led to this investigation, and to the Canadian Nurses' Foundation for their continued interest.

Sincere thanks are directed also to family, friends, and students for their sustained interest, patience, and generosity throughout the course of this study.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	x
LIST OF CHARTS	xv
LIST OF APPENDICES	xix
CHAPTER	
I. THE PROBLEM	1
The Background of The Problem	2
The Need for This Study	7
The Problem and Purposes of the Study	10
The Problem	10
The Purposes	11
Some Basic Assumptions	12
The Method of Investigation	12
The Definition and Usage of Terms	15
The Limitations	20
The Expected Outcomes	21
II. THE EVALUATIVE CONTEXT OF THIS STUDY	23
The Nature of Evaluation	23
The Evaluation Process	27
Some Postulates for Evaluation	34
The Application to the Design of This Study	39
III. THE FORMULATION OF THE GUIDING PRINCIPLES AND CRITERIA FOR THE PREPARATION OF THE INSTRUMENT	41

Chapter | Page

The Selection of the Method for Formulating the Guiding Principles and Criteria for This Study. 42
Selected Related Studies. 45
Related Self-Appraisal Instruments. 50
The Selection of Sources for the Guiding Principles and Criteria for This Study. 53
Selected Canadian Sources. 53
Selected British Sources. 61
Selected American Sources. 63
Formulation of the Principles and Criteria. 66
The Principles. 67
The Criteria. 70
The Design of the Instrument. 72

IV. THE COLLECTION AND TREATMENT OF THE DATA 74

The Selection of the Respondents. 74
Testing the Instrument and Method. 75
The Collection of the Data. 76
The Respondents. 81
The Nature of the Data. 85
The Reliability of the Data. 86
The Validity of the Data. 87
The Variables. 88
The Purposes of the Analysis. 90
The Treatment of the Data. 91
The Measures and Their Interpretation. 93
The Presentation of the Data. 99

V. THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE GUIDING PRINCIPLES AND SELECTED CRITERIA FOR SOME MAJOR DIMENSIONS OF THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM 101

The Guiding Principles. 102

Chapter Page

The Endorsement of the Criteria for the Nature and Organization of the School Health Program. 104
Relative Agreements Between the Respondents on Groups of Criteria for some of the Major Dimensions of the School Health Program
Analysis According to Profession. 111
Analysis According to Type of Preparation. . . 114
Analysis According to Length of Experience. . . 119
Analysis According to Range of Involvement. . . 122
Summary and Conclusions. 124
Conclusions. 130

VI. THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR HEALTHFUL SCHOOL LIVING. . 133

The Endorsement of Criteria For Healthful School Living
The Health of School Personnel. 134
The Emotional and Social Environment of the School. 140
The Physical Environment. 143
Safety and Accident Prevention Within the School Buildings and Grounds. 145
Safety and Accident Prevention on the Way to and from school. 147
School Lunch Facilities and Services. 148
Summary. 151
Relative Agreements Between the Respondents on Groups of Criteria for Healthful School Living
Analysis According to Profession. 153
Analysis According to Type of Preparation. . . . 156
Analysis According to Length of Experience. . . . 160
Analysis According to Range of Involvement. . . . 163
Summary and Conclusions. 163
Conclusions. 167

Chapter Page

VII. THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR HEALTH EDUCATION. 169

Student Health Education
The Endorsement of the Criteria for Student Health Education. 170
The Planning and Conduct of Health Instruction. . 171
Personnel for Health Instruction. 175
Proposed Topical Content Areas. 178
Relative Agreements Between the Respondents on Groups of Criteria for Student Health Instruction
Analysis According to Profession. 181
Analysis According to Type of Preparation. . . . 182
Analysis According to Length of Experience. . . 187
Analysis According to Range of Involvement. . . 190
Professional Preparation and Continuing Education
The Endorsement of Criteria for Professional Preparation and Continuing Education. 193
Professional Preparation in School Health and Health Education. 193
Continuing Education in School Health and Health Education. 195
Relative Agreements Between the Respondents on Groups of Criteria for Professional Preparation and Continuing Education
Analysis According to Profession. 198
Analysis According to Type of Preparation. . . 199
Analysis According to Length of Experience. . . 202
Analysis According to Range of Involvement. . . 204
Summary and Conclusions. 204
Conclusions. 207

VIII. THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR SCHOOL HEALTH SERVICES. 209

The Endorsement of the Criteria for School Health Services. 210

Chapter — Page

The Nature of School Health Services. 210
The Planning of Health Services. 213
Personnel for Health Services. 216
Health Appraisals. 219
Medical Examinations. 225
Dental Health Services. 229
Mental Health Services. 231
Cumulative Health Records. 234
Counseling and Follow-Up Services. 237
Communicable Disease, Prevention, Detection and Control. 240
First Aid and Emergency Care. 243
Facilities for School Health Services. 245
Provisions for Exceptional (Handicapped) Pupils. . 247
Relative Agreements Between the Respondents on Groups of Criteria for School Health Services
Analysis According to Profession. 249
Analysis According to Type of Preparation. . . . 253
Analysis According to Length of Experience. . . . 256
Analysis According to Range of Involvement. . . . 258
Summary and Conclusions. 260
Conclusions. 264

IX. CONCLUSIONS AND IMPLICATIONS. 266

The Major Findings
Endorsement. 267
Relative Agreement in the "Definitely Applicable" Judgments of the Respondents. 276
The Conclusions. 290
Some Implications
Implications for Theory. 293
Implications for Further Studies. 294
Some Implications for Practice. 295

APPENDICES. 297

Page

BIBLIOGRAPHY 504

LIST OF TABLES

Table		Page
1.	The Response According to the Profession of the Respondents.	77
2.	The Manner in Which the Data were Collected. . . .	78
3.	Return of the Questionnaire in Relation to the Reminders.	79
4.	Completion of the Schedule by Sections	80
5.	Respondents' Provincial and National Distribution .	81
6.	The Types of Preparation of the Respondents. . . .	82
7.	The Approximate Total Number of Years of Experience of the Respondents.	83
8.	The Range of Involvement of the Respondents. . . .	84
9.	An Example of Consistency.	87
10.	The Measures of the "Definitely Applicable" Judgments on the Guiding Principles According to Profession, Type of Preparation, Length of Experience, and Range of Involvement.	103
11.	The Comparison of the Measures of Agreement on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Profession	112
12.	The Comparison of the Measures of Agreement on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Type of Preparation.	115

Table		Page
13	The Comparison of the Measures of Agreement on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Profession and to Health and Education Preparation.	117
14.	The Comparison of the Measures of Agreement on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Length of Experience.	120
15.	The Comparison of the Measures of Agreement on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Range of Involvement.	123
16.	The Proportions of Criteria Endorsed by Both Professional Groups in the Groups of Criteria for Some Major Dimensions of the School Health Program.	125
17.	The Proportion of Criteria for Healthful School Living Endorsed by Both Professional Groups.	152
18.	The Comparison of the Measures of Agreement on the Groups of Criteria for Healthful School Living According to Profession	154
19.	The Comparison of the Measures of Agreement on the Groups of Criteria for Healthful School Living According to Type of Preparation.	157
20.	The Comparison of the Measures of Agreement on the Groups of Criteria for Healthful School Living According to Profession and to Health and Education Preparation.	158
21.	The Comparison of the Measures of Agreement on the Groups of Criteria for Healthful School Living According to Length of Experience	161
22.	The Comparison of the Measures of Agreement on the Groups of Criteria for Healthful School Living According to Range of Involvement.	164

Table		Page
23.	The Proportion of the Criteria for Student Health Instruction Endorsed by Both Professional Groups.	181
24.	The Comparison of the Measures of Agreement on the Groups of Criteria for Student Health Instruction According to Profession.	183
25.	The Comparison of the Measures of Agreement on the Groups of Criteria for Student Health Instruction According to Type of Preparation.	185
26.	The Comparison of the Measures of Agreement on the Groups of Criteria for Student Health Instruction According to Profession and to Health and Education Preparation Groups.	188
27.	The Comparison of the Measures of Agreement on the Groups of Criteria for Student Health Instruction According to Length of Experience	189
28.	The Comparison of the Measures of Agreement on Groups of Criteria for Student Health Instruction According to Range of Involvement	191
29.	The Proportion of Criteria for Professional Preparation and for Continuing Education Endorsed by Both Professional Groups.	198
30.	The Comparison of the Measures of Agreement on Groups of Criteria for Professional Preparation and Continuing Education According to Profession ..	198
31.	The Comparison of the Measures of Agreement on Groups of Criteria for Professional Preparation and Continuing Education According to Type of Preparation.	200
32.	The Comparison of the Measures of Agreement on the Groups of Criteria for Professional Preparation and Continuing Education According to Profession and to Health and Education Preparation Groups.	201

Table		Page
33.	The Comparison of the Measures of Agreement on the Criteria for Professional Preparation and Continuing Education According to Length of Experience.	203
34.	The Comparison of the Measures of Agreement on the Criteria for Professional Preparation and Continuing Education According to Range of Involvement. . .	205
35.	The Proportion of Criteria for School Health Services Endorsed by Both Professional Groups.	250
36.	The Comparison of the Measures of Agreement on the Groups of Criteria for School Health Services According to Profession.	251
37.	The Comparison of the Measures of Agreement on the Groups of Criteria for School Health Services According to Type of Preparation.	254
38.	The Comparison of the Measures of Agreement on the Groups of Criteria for School Health Services According to Profession and According to the Health and Education Groups.	255
39.	The Comparison of the Measures of Agreement on the Groups of Criteria for School Health Services According to Length of Experience	257
40.	The Comparison of the Measures of Agreement on the Groups of Criteria for School Health Services According to the Range of Involvement.	259
41.	The Proportions of Criteria Endorsed at the 75 Per Cent Level	268
42.	Rank Order of the Groups of Criteria According to the Proportion Endorsed by Both Professional Groups	270
43.	The Proportions of Criteria for the Component Parts of the School Health Program Endorsed by Both Professional Groups, By the Educators Only, and by the Public Health Workers Only	272

Table Page

44. Reported Problems and Priorities 284

LIST OF CHARTS

Chart		Page
1.	The Interpretation of the Average Difference and the Value of Tau	97
2.	The Endorsement of the Criteria for the Nature and Organization of the School Health Program According to Profession	106
3.	The Comparison of the Relative Agreements on the Groups of Criteria for Some Major Dimensions of the School Health Program According to Profession	113
4.	The Endorsement of the Criteria for the Health of School Personnel According to Profession	136
5.	The Endorsement of the Criteria for the Emotional and Social Environment According to Profession . . .	142
6.	The Endorsement of the Criteria for the Physical Environment of the School According to Profession.	144
7.	The Endorsement of the Criteria for Safety and Accident Prevention Within the School Buildings and Grounds According to Profession	146
8.	The Endorsement of the Criteria for Safety and Accident Prevention on the Way to and from School According to Profession.	147
9.	The Endorsement of the Criteria for School Lunch Facilities and Services According to Profession. . .	150
10.	The Comparison of the Relative Agreements on the Groups of Criteria for Healthful School Living According to Profession.	155

Chart		Page
11.	The Endorsement of the Criteria for the Planning and Conduct of Health Instruction According to Profession	172
12.	The Endorsement of the Criteria for Personnel for Health Instruction According to Profession	176
13.	The Endorsement of the Criteria for Proposed Topical Content Areas According to Profession . .	179
14.	The Comparison of the Relative Agreements on the Groups of Criteria for Student Health Instruction According to Profession	184
15.	The Endorsement of the Criteria for Professional Preparation in School Health and Health Education According to Profession	194
16.	The Endorsement of the Criteria for Continuing Education in School Health and Health Education According to Profession	196
17.	The Endorsement of the Criteria for the Nature of School Health Services According to Profession. .	211
18.	The Endorsement of the Criteria for the Planning of School Health Services According to Profession. .	214
19.	The Endorsement of the Criteria for Personnel for School Health Services According to Profession. .	217
20.	The Endorsement of some General Criteria for Health Appraisals According to Profession	220
21.	The Endorsement of the Criteria for Screening Tests According to Profession	223
22.	The Endorsement of the Criteria for Medical Examinations According to Profession.	226
23.	The Endorsement of the Criteria for Dental Health Services According to Profession	230

Chart		Page
24.	The Endorsement of the Criteria for Mental Health Services According to Profession	233
25.	The Endorsement of the Criteria for Cumulative Health Records According to Profession	235
26.	The Endorsement of the Criteria for Counseling and Follow-up According to Profession	238
27.	The Endorsement of the Criteria for Communicable Disease Prevention, Detection, and Control According to Prevention	241
28.	The Endorsement of the Criteria for Planning for First Aid and Emergency Care According to Profession	244
29.	The Endorsement of the Criteria for Facilities for School Health Services According to Profession . .	246
30.	The Endorsement of the Criteria for Provision for Exceptional (Handicapped) Children According to Profession	248
31.	The Comparison of the Relative Agreements on the Groups of Criteria for School Health Services According to Profession	252
32.	The Criteria Endorsed by the Educators but Rejected by the Public Health Workers	274
33.	The Criteria Endorsed by the Public Health Workers but Rejected by the Educators	275
34.	The Comparison of the Relative Agreements on the Groups of Criteria According to Profession	277
35.	The Comparison of the Relative Agreements Between the Professional Groups and Between the Education and Health Preparation Groups	279
36.	The Comparison of the Relative Agreements Between the Under-10-Year and the 10-19-Year Experience Groups with those Between the 10-19-Year and the 20-Year-and-more Experience Groups	281

Chart | Page

37. The Comparison of the Relative Agreements Between the Professional Groups with those Between the Involvement Groups 282

38. The Comparison of the Directions of Judgments According to Preparation 286

39. The Comparison of the Directions of Judgments According to Length of Experience 288

LIST OF APPENDICES

Appendix		Page
A	A Selected, Annotated Bibliography on the Development of School Health Programs in Canada.	297
B	The Canadian Background.	308
C	The Interview Schedule Questionnaire Instrument. . . .	335
D	A Comparison of the 1950 and 1962 Terminology in School Health Education.	377
E	The Sources of the Guiding Principles and Criteria. . .	384
F	The Guiding Principles and Criteria.	394
G	Supplementary Tables on Some Characteristics of the Respondents.	408
H	The Percentages of the "Definitely Applicable" Judgments of the Respondents on the Guiding Principles and Criteria According to Profession, Type of Preparation, Length of Experience and Range of Involvement.	416
I	The Groups of Criteria used in the Determination of the Relative Agreements Between the Groups of Respondents.	447
J	Criteria Judged At Least 10 Per Cent Higher by One Respondent Group.	451
K	Summary Tables of the Measures of Agreement.	485
L	The Guiding Principles and Criteria Endorsed by Both Groups.	493

CHAPTER I

THE PROBLEM

This study is concerned with the development of empirical[1] guiding principles and criteria for Canadian school health programs.

The term "school health program" describes the composite of healthful school living, health education, and health services for the promotion of the health of students and school personnel.[2] It refers to those programs and activities carried on under the jurisdiction of the schools and the official health departments. It recognizes the necessary coordination with family and other community health resources, but it is not synonomous with the total community health program for children and youth.

---

[1] This word is used in the sense of "ready to test," as suggested by the definition: "capable of being verified or disproved by observation or experiment," Webster's Seventh New Collegiate Dictionary (Springfield, Mass.: G. & C. Merriam Co., 1963), p. 271.

[2] An adaptation of the definition of the Joint Committee on Terminology of the American Association for Health, Physical Education and Recreation; the Public Health Section and the School Health Section of the American Public Health Association; and the Society of Public Health Educators, "Health Education Terminology," Journal of Health, Physical Education and Recreation, XXXIII (November, 1962), p. 27.

This problem was chosen for study because of the lack of any comprehensive set of guiding principles and criteria for use in the planning, development, and maintenance of the Canadian school health program. Criteria for the upper elementary grades of Canadian school health programs were developed nearly fifteen years ago, but have not been extended to other grade levels, or reappraised since.[1] Experience in both education and in public health, in committees on school health, and in several studies, has led the writer to a conviction that both the teachers and the public health workers have to be involved in the appraisal and evaluation of a program if the results of a study are to be implemented enthusiastically in replanning.

The Background of the Problem

The guiding principles and criteria for school health programs are moulded by conditions in the socio-cultural environment, by forces in the fields of education and public health, and by situations within the programs.

Most Canadian programs are influenced by the British, American and French traditions, and relationships. As Phillips said,

---

[1] Margaret E. Nix, "Teachers' Concepts of a School Health Program," (unpublished doctoral dissertation, University of Michigan, 1953).

"In nearly every aspect of education, the Canadian position is between that of England and that of the United States."[1] Canadian health and welfare programs demonstrate the influence of Britain in their legal foundations and in their relationships to similar social legislation.

Although the original school health programs were introduced in Canada, in most instances, by educators in local and provincial departments of education, it was not long before the assistance of the provincial and local departments of health was sought.[2] Almost all Canadian school health programs are a part of both an educational program and a part of a community public health program. This interagency involvement is the most unique feature of the Canadian school health program. A division of responsibility has evolved: the public health workers assume the major responsibility for school health services and some supervision of the environmental sanitation of the school buildings and grounds, and the educators assume the major responsibility for health instruction in the classroom and for healthful school living.

---

[1] Charles E. Phillips, The Development of Education in Canada (Toronto: W.J. Gage and Company Ltd., 1957), p. 301.

[2] An annotated bibliography on the development of the Canadian school health program is included in Appendix A.

The three component parts of the school health program, healthful school living, health education, and health services, are interdependent. These divisions provide a convenient framework for looking at each part of the whole. As a part of a school curriculum each of these component parts must be truly educational. It has been said:

> It is quite impossible to separate health education from health services. Every service has educational implications and the level of health education in the community will determine the degree to which the people utilize existing services and support the development of other needed services.[1]

Differences in the administrative structures for public health and education contribute to the problem. The British North America Act of 1867 divided responsibility for public health between the federal and provincial levels, whereas responsibility for education was delegated to the provinces with the exception of the education of children living in the unorganized territories, and the education of Indian children.[2] Although there are administrative divisions of responsibility for health at each level of government, there is no

---

[1] Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, Health Appraisal of School Children (2nd ed.; Washington, D.C.: National Education Association, 1957), p. 51.

[2] Canada, British North America Acts, 1867 - 1951 (Ottawa: Queen's Printer, 1952).

federal department of education although a number of the federal departments have some educational responsibilities. In some provinces the school health services are provided from the provincial level to the local level which means that these provincial departments of health must work with both the provincial and local departments of education, and this may be difficult in those provinces where local autonomy is valued.[1]

The school health program, as well as its parent programs, education and public health, have developed in a climate of rapid social change. Advances in science and technology have influenced the development in both fields. Automation, mass production, and new techniques have stimulated the development of technical and vocational education. School health programs are almost universal in elementary schools and are being extended throughout the high schools in most of the provinces.

As the standard of living has risen the demands for material possessions and services have been increasing. This is reflected in the broad programs of social legislation, some of which have direct

---

[1]J.E.F. Hastings and W. Mosley, Organized Community Health Services, Report of a Study for the Royal Commission on Health Services (Ottawa: Queen's Printer, 1966), p. 5.

implications for the health of children and youth, while others have less direct, but nonetheless important, influence.

Although coverage under voluntary medical care insurance has increased from 35 per cent of the population in 1953 to 52 per cent in 1962,[1] the introduction of a national medicare scheme (physicians' services) in July 1968[2] raises questions about potential changes in public health programs which may affect the school health program.

The age distribution of the Canadian population of which approximately one-third is under fifteen years of age, and almost one-half is under twenty-five years of age, has created pressures on some of the institutions and agencies serving children and their families.[3]

The relatively smaller numbers of persons in the age range between thirty and forty-five years, coupled with the levels of education, contribute to the shortage of teachers and public health workers, and that of their allied professional workers.

Immigration from non-English speaking countries has resulted

---

[1] Canada, Dominion Bureau of Statistics, Canada 1965-66 (Ottawa: Queen's Printer, 1965), pp. 209-210.

[2] Globe and Mail (Toronto), September 9, 1966, p. 1.

[3] Canada, Canada 1965-66, p. 16.

in the investment of disproportionate amounts of time on the part of educators and public health workers in helping these families, partially because there is less rapid integration of such persons into Canadian society.

Further detail and documentation of the background forces is included in Appendix B.

The Need for This Study

This study is important because both educators and public health workers are perceiving a need for changes in the school health programs.

As the programs have evolved public health has veered away from the institution or agency-centered program toward a life-centered program, so while educators are concerned primarily with the child from about five years of age to the youth of about eighteen or nineteen years of age, the public health workers are concerned with both those below and above this age range.

Public health workers are proposing the reduction of time spent in the school health program in order to provide more time for prenatal teaching, infant and preschool work, and assistance for the chronically ill and the aged.[1] They have been justifying this on the

---

[1] Canada, Department of National Health and Welfare, Report of the Survey of Health Unit Services in Eight Provinces of Canada 1960 (Ottawa: The Department, 1961), p. 47.

argument that the school population comprises one of the healthiest segments of the population. Although Canada has not had comprehensive morbidity rates since the conclusion of the Canada Sickness Survey in 1951,[1] McCreary reported from a survey of health facilities that only about three-quarters of the children appeared to be in good health at the time of the school entrance examinations. He said that the percentages of children immunized against diphtheria, pertussis, tetanus, smallpox, and poliomyelitis ranged from 8 per cent to 100 per cent with averages of 76 per cent to 91 per cent. The data were collected from provincial departments of health, community health units, and hospitals with more than fifty beds in all of the provinces except New Brunswick, Newfoundland, and Quebec.[2]

Some boards of education are asking boards of health to provide full-time public health nursing services in large schools in urban areas.[3]

---

[1] Robert Kohn, "Volume of Illness," Canadian Journal of Public Health, XLVIII (August, 1956), pp. 332-42.

[2] John F. McCreary, Evaluation of Prenatal Programmes, Well Baby Clinics, Preschool Clinics, School Health Services, Mental Health Programmes, and Special Hospital Facilities for Children (Toronto: Canadian Conference on Children, 1960), pp. 10-13.

[3] B. Russell, "School Health Attendants," Canadian Journal of Public Health, LI (November, 1960), p. 462.

Interview with Mrs. J. Deeks, Director of Public Health Nursing, Scarborough Department of Health, October 6, 1966, to recall that the request for full-time service was made by the Scarborough Board of Education in December 1963, and full-time service began that fall.

Public health workers report that these educators want merely a full-time first aid service.[1] Educators claim that the public health workers do not have sufficient time to work with the student with early emotional and social problems.[2] Medical officers of health have declared that more must be done to further understanding between the public health workers and the educators.[3]

Although the public health workers believe in health as physical, emotional, and social well-being, the educators seem to perceive emotional health as apart from physical health. Hollister has said that school mental health services are only a part of the field of

---

The writer participated in the meetings between the Leaside Board of Education and the educational administrators and the East York-Leaside Board of Health and its senior staff during the winter and spring of 1965 prior to the provision of full-time service for the Leaside High School.

Interview with Dr. A. Mogadam, School Health Physician, Metropolitan Health Committee, Vancouver, British Columbia, on June 9, 1965 in which he told the writer that the Board of Education had requested full-time service in the spring of 1965, a report was done by the provincial department of health, and public health nurses were to be assigned in September on a full-time basis in high schools with at least 1500 students.

[1] Hastings and Mosley, p. 28.

[2] The writer has been a member of the Committee on Mental Health Services in the School of the Ontario Welfare Council, since 1963, where educational administrators have presented their views on the need for a social worker in the school.

[3] Canada, Report of the Survey of Health Unit Services ..., p. 48.

school mental health as perceived by educators.[1] In some of the larger urban centers in Canada at least two separate mental health services for children and youth are in operation.[2]

Many Canadian studies of the school health program have been studies of health education by educators, or studies of school health services by public health workers, rather than of the whole program.

Some principles and criteria are inherent in the relatively small body of professional literature on school health in Canada. Both British and American references have been used with some adaptation to the Canadian situation.

The Problem and Purposes of the Study

The Problem

The problem of this study may be stated in two related questions:

1) What empirical guiding principles and criteria can be developed by synthesizing the concepts and constructs from authoritative Canadian, British and American literature, with the judgments of selected Canadian leaders in education and in public health?

---

[1] William G. Hollister, "Some Problems in Providing School Mental Health Services," American Journal of Public Health, LIII (September, 1963), pp. 1447-51.

[2] For example, the City of Toronto.

2) What does the relative agreement, or lack of agreement, in the judgments of these leaders, according to profession, type of preparation, length of experience, and range of involvement, indicate about the potential utilization of some of the criteria, and the need for redefinition of some of the rejected criteria?

This problem is related to those in the development of appraisal instruments by educational and health agencies, and to those in a group of studies in education and public health in which evaluative criteria were developed, the most significant of which are reviewed in Chapters II and III.

The Purposes

The primary purpose of this study is to initiate the development of a self-appraisal schedule for use by educators and public health workers in evaluating the health program in the school, essentially as a device for interdisciplinary program planning and continuing education.

Immediate goals to implement this are:

1) Formulation of guiding principles and criteria through a synthesis of the concepts and constructs in authoritative Canadian, British and American literature.

2) Determination of the applicability of these guiding principles and criteria for Canadian school health programs according to the judgments of selected leaders in education and public health.

A secondary purpose is to determine the influence of the type of preparation, the length of experience, and the range of involvement of the respondents in the extent of their relative agreement in their judgments on applicability.

Some Basic Assumptions

The following assumptions are basic to the design and procedures of this study:

1) A careful study of authoritative Canadian, British and American literature should enable the writer to formulate guiding principles and criteria for Canadian school health programs.

2) Those persons engaged in selected leadership activities in education and in public health should make reasonably valid judgments about the applicability of the guiding principles and criteria for Canadian school health programs.

The Method of Investigation[1]

This is a developmental, exploratory study involving the use of the methods and tools of descriptive-survey-normative research.

---

[1] All aspects of the design of the instrument, the collection and the treatment of the data are elaborated in Chapters III and IV.

Tentative guiding principles and criteria were formulated through a synthesis of the concepts and constructs in authoritative Canadian, British and American literature. These guiding principles and criteria were used as the basis for the development of an interview-schedule-questionnaire instrument.[1] A copy of this instrument is included as Appendix C.

Judgments were sought from a population of leaders in Canadian education and public health, persons who have been involved in at least one of the following school health activities: research, publication, committee work, and teaching. Each respondent was asked to judge each guiding principle and each criterion as "definitely applicable," "possibly applicable," or "definitely not applicable," for use in the planning, development, and maintenance of school health programs in Canada.

The data were collected by interview and by questionnaire. About one-half of the data was collected entirely by questionnaire due to distance and time. The same instrument was used for the collection of the data by interview and by questionnaire.

The data were analyzed for the endorsement of each guiding principle and each criterion as indicated by support from at least

---

[1]The British spelling was used in this instrument in deference to the educators in some provincial departments of education which insist on its use.

75 per cent of the educational respondents and of the public health respondents, and were analyzed according to the relative agreement, or lack of agreement, between the respondents on the basis of profession, type of preparation, length of experience, and range of involvement.

For the determination of the relative agreements the criteria were grouped into twenty-six groups of related criteria. The "definitely applicable" judgments of the respondents were presented in percentages and rank ordered within each group.

The relative agreement, or lack of agreement, in the respondents' judgments was shown by three types of measures:

1) The difference in percentage between the judgments of the groups of respondents on each guiding principle and each criterion, the average difference for a group of related criteria, and the average of the average differences for related groups of criteria, were determined according to profession, type of preparation, length of experience, and range of involvement of the respondents.

2) Kendall's tau was used to show the similarity, or lack of similarity, in the rank order of the "definitely applicable" responses when the average difference was at least 8 per cent. If the average difference was less than 8 per cent the judgments of a relatively few persons could alter the rankings so that the similarity in the rankings was not stable.

3) The proportion of the criteria within a group of related criteria that were judged higher by one group of the respondents than by another group was determined to show which of the respondent groups made higher, or more liberal, judgments, and which made lower, or more conservative, judgments.

The Definition and Usage of Terms

Most of the school health terms used in this study are based on the 1950 report of the Joint Committee on Terminology in Health Education of the American Association for Health, Physical Education and Recreation and the American School Health Association,[1] and the 1962 report of the American Association for Health, Physical Education and Recreation; the Public Health Section and the School Health Section of the American Public Health Association; and the Society of Public Health Educators with assistance from the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. These are compared in Appendix D.

---

[1] Committee on Terminology in Health Education, "Terminology," Journal of Health, Physical Education and Recreation, XXII (October, 1950), pp. 14-16.

[2] Committee on Terminology in Health Education, "Terminology," Journal of Health, Physical Education and Recreation, XXXIII (November, 1962), pp. 27-28.

It was not considered advisable to use some of the terms of the 1962 report, for example, "health science instruction," with which Canadian educators and public health workers might not be familiar.

Most of the school health terms are defined in the text, or in a footnote, when introduced. The following are the basic terms in this study:

General Principle: (1) originally, a temporal or normative priority (from the Latin principium, lit., "beginning"); hence, the first proposition of an argument, upon which other propositions depend for their validity; now used to signify a generalized statement through which unrelated data are systematized and interpreted.[1]

The general principles are the translations of the most general objectives, or statements of purpose, those which reflect the values. The general principles seem almost universal in their application.

Guiding Principle: a generalization that is not sufficiently complete to make it acceptable as a scientific explanation but is useful as a guide to further study or a choice of action.[2]

The guiding principles are slightly more definitive than the general principles. They are the translations of the next lower level of objectives. They provide a framework for the organization of their related criteria.

---

[1] Carter V. Good, Dictionary of Education (2nd ed.; New York: McGraw-Hill Book Co., 1959), p. 412.

[2] Horace V. English and Ava Champney English, A Comprehensive Dictionary of Psychological and Psychoanalytical Terms (New York: McKay Publishing Co., 1958), p. 48.

Criterion: (1) a standard, norm, or judgment selected as a basis for quantitative and qualitative comparison.[1]

The criteria are the translations of the sub-objectives into terms of comparative levels of practice and acceptable standards. They are the translations of the principles into the practical norms which can be applied in the evaluation of the program. Each criterion should have, at least implied in it, one or more of:

1) Observable, objectively measurable evidence of change or status.

2) Subjective or judgmental evidence of change or status.

3) Inferential indices of change, based on the assumption that if a specific action is taken in a specific way a specific outcome may be expected.[2]

While the observable and objective indices include mortality and morbidity rates, immunization rates, patterns of population shift, and rates of use of services, these were not included in this study because there would seem to be almost no doubt about their utilization in an evaluation schedule.

The subjective criteria, based on judgmental indices or standards, were chosen, as Freeman and Holmes said, "... On what is best possible rather than what is best."[3] The potential availability of

---

[1] Good, p. 146.

[2] Ruth B. Freeman and Edward M. Holmes, Administration of Health Services (Philadelphia: W.B. Saunders Co., 1960), p. 220.

[3] Ibid, p. 225.

resources influence these criteria.

The usual inferential criteria, especially notable in many evaluations of the public health programs, the number of children seen, the number of referrals made, the number of pieces of educational literature distributed, and the number of talks given, have been almost deleted from this study. Other inferential criteria with implications for the coordination of the school health program with parental responsibility for the health of children and youth, for coordination of the school health program with family medical and dental supervision, for planning and organization of the school health program, and for communications were introduced. Some of these criteria are cumulative.

Specification: ... 3. Specific definition or description. ... 4. Specific, explicit, or detailed mention, enumeration, or statement of something. ...[1]

The specifications indicate the specific measurements for the appraisal of attainment of the criteria. In some studies on criteria there seems to have been little differentiation between criteria and specifications. The writer believes that the specifications may be more dependent than the criteria on local or regional situations, so the specifications can be determined by the professional workers

---

[1] The Shorter Oxford English Dictionary (3rd ed.; Oxford: Clarendon Press, 1959), p. 1962.

involved in the program. This affords opportunities for their involvement in which they are able to use their understanding of local and regional conditions. It offers greater flexibility in that some of the specifications may change more rapidly than the criteria.

Judgment: a critical evaluation of a person or situation. It includes the processes of appreciation, comparison and appraisal of of values.[1]

Evaluation: the process of determining the value or amount of success in achieving a predetermined objective. It includes at least the following steps: Formulation of the objective, identification of the proper criteria to be used in measuring success, recommendations for further program activity.[2]

Health: a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.[3]

Public Health: the science and art of preventing disease, prolonging life, and promoting health and efficiency through organized community efforts for the sanitation of the environment, the control of communicable infections, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery to ensure for every individual a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity.[4]

---

[1] English and English, p. 282.

[2] "Glossary of Administrative Terms in Public Health, American Journal of Public Health, L (February, 1960), pp. 226.

[3] Final Acts of the International Health Conference (New York: United Nations, Lake Success, 1946), p. 9.

[4] Fraser Brockington, World Health (London: Penguin Books Ltd., 1958), p. 20. (This is an adaptation of C.E.A. Winslow's definition by the Expert Committee on Public Health Administration of the World Health Organization.)

Health Unit or Health Department: The administrative agency providing public health and related services directly to the people of a community or local area, under the direction of a full-time Medical Officer of Health.

1. This will include Health Units within a metropolitan public health service, County Health Units and Health Districts which meet the foregoing definition.

2. Services of a Health Unit include those provided by the Provincial or Metropolitan Health Department for which the Health Unit has responsibility.[1]

The Limitations

This study does not include the development of all of the specific criteria for the correlation of health education with programs in physical education, guidance, or special education, or for the correlation of school health services with family and community health services.

It will not be possible to project the findings of this study to the judgments of all Canadian educators and public health workers since no attempt was made to use random sampling methods in the choice of the respondents. It was decided that the leaders in education and in public health who were recognizable as the "change agents" in Canadian school health programs were the logical persons to make valid judgments on the applicability of the guiding principles and criteria. Since this population of leaders was not large it was decided to try to obtain the judgments from as many as possible of them.

---

[1] Canada, Report of the Survey of Health Unit Services..., p. 4.

The Expected Outcomes

If the school health program is to fulfill its educational objective of providing positive health learning experiences for children and youth during these formative years, both educators and public health workers need guidelines as a basis for the planning, development, and maintenance of school health programs.

An understanding of the areas in which there were relatively high agreements, and those areas in which there were relatively low agreements, between these educators and public health workers, should be valuable in improving professional preparation and continuing education in school health and health education for both educators and public health workers, and in furthering more constructive interdisciplinary and interagency communication about the planning, development, and maintenance of school health programs through a joint program of appraisal and evaluation.

Information about the influence, or lack of influence, of the type of preparation, length of experience, and range of involvement, of the respondents, in their judgments should be useful in the planning and development of school health programs.

This study is intended as an initial step in the definition of guiding principles and criteria for the development of a self-appraisal

schedule.

It is hoped that the report of this study will provide the basis for a working document to stimulate the involvement of educators and public health workers in the further definition, utilization, and subsequent revision of principles and criteria for Canadian school health programs.

CHAPTER II

THE EVALUATIVE CONTEXT OF THIS STUDY

The planning of this study, from the very selection of the principles and criteria as the starting point, was dependent, in part, upon the nature and processes of evaluation. The development of the instrument and even the potential utilization of the findings were related to evaluation.

The Nature of Evaluation

Evaluation is not synonomous with research although it uses the same general statistical, epidemiological and technical methods. It differs in that it marks progress rather than attempts to seek new knowledge, "Its findings are reincorporated into the specific goals from which they came."[1] This circular nature of evaluation promises revitalization of the program.

Nor is evaluation the same as educational "measurement." Measurement may be concerned primarily with a single aspect of achievement in subject matter, skill or ability. Evaluation is

---

[1] George James, "Evaluation in Public Health Practice," American Journal of Public Health, LII (July, 1962), p. 1145.

concerned with the broader characteristics and achievements of a program, with the progress toward goals. While evaluation implies some measurement, measurement does not imply evaluation.

The fundamental purpose of evaluation is to improve the quality of decision-making in the planning, development, and maintenance of a program. James has proposed some important specific purposes:

> ...When we try to do something for people there must be ongoing evaluation, not just for scientific merit, but for acceptability. If we have a fine vaccine, for example, we need not just prove that it works, we also require an ongoing evaluation of our programs to get doctors and the public to accept it.
>
> Evaluation searches out the strong and weak points in new programs and pilot projects. From it we get leads to future methods, better than the ones we now have. Without it, we would not know whether what we were doing was effective, and we would not know what points within a program to emphasize and which to de-emphasize or drop. As we move into the future of public health, we will not only have to attempt the new, but we will have to watch it and evaluate it as we go ahead. Evaluation is our major basis for insuring our continued humility, maintaining our flexibility, exploiting the fruits of controversy and keeping our efforts relevant.[1]

---

[1] George James, "The Coming Era in Health Education," Paper read before the meeting of the Society of Public Health Educators as the First Mona B. Shackman Lecture in Public Health Education (New York: Society of Public Health Educators, n.d.), p.10.

The earlier Evaluation Schedules[1] of the American Public Health Association were essentially quantitative in nature. Later editions introduced some qualitative judgments.[2] From an assessment of current status, a change in approach evolved to the view of evaluation in the perspective of program development on the basis of the acceptance of two tenets:

1) Planning for the evaluation of a program should be interwoven with planning for the program itself.

2) Evaluation techniques should be applied in the improvement of planning.[3]

In the development of a new program, the objectives, the guiding principles and the criteria should be determined in the planning stages so that the bases for evaluation are built into the program.[4] Getting differentiated "prospective evaluation" as an operational tool designed during the planning phase for periodic application during the implementation of the program. He said:

---

1 Committee on Administrative Practice, American Public Health Association, Appraisal Form for City Health Work (1st ed., 1925, 37 pp.; 2nd ed., 1926, 68 pp.; 3rd ed., 1929, 103 pp.; 4th ed., 1934, 136 pp.; New York: The Association, 1925-1934).

_____, Appraisal Form for Local Health Work (New York; The Association, 1938), pp. 185.

2 _____, Evaluation Schedule for Use in the Study and Appraisal of Community Health Programs (New York: The Association, 1947), pp. 54.

_____, Guide to a Community Health Study (2nd ed., ;New York: The Association, 1961), pp. 156.

3 Proceedings of the First National Conference on Evaluation in Public Health (Ann Arbor, Mich.: School of Public Health, 1955), p. 4.

4 Ibid, p. 8.

> ...Findings of the evaluation should be utilized to modify the program so as to maximize the program's success. In this process objectives may be redefined, methods, techniques and activities may be altered. As the program fully obtains its objectives it is terminated or a new program with new objectives is developed. This type of prospective evaluation cannot be utilized when assessment has not begun until later during the implementation phase and it is desired to look back and evaluate past experience.[1]

For the already established program, Getting has described "retrospective evaluation:"

> ...(This) is apt to be more normative wherein the evaluator uses comparative levels of practice, generally accepted standards and his own experience as the value system. Occasionally in this type of retrospective evaluation, the evaluator will find that objectives have been predetermined in measurable terms and he may be able to assess accurately the activities and techniques as to more precise degrees of effectiveness, efficiency or other value factors. In such instances there may then be a combination of retrospective and prospective evaluation.[2]

Evaluation of effectiveness is directed toward the assessment of the extent to which work accomplishes what it is intended to accomplish. Evaluation of efficiency always includes some concepts of the appraisal of effectiveness, and compares the costs or activities with the accomplishments. In the Los Angeles School Health Education Evaluation Study it was postulated that the effectiveness of health education requires three types of appraisal: appraisal of school health

---

[1]Vlado A. Getting, "Program Planning, Implementation and Evaluation," Paper read before the Eighth Annual Refresher Course, School of Hygiene, University of Toronto, Toronto, Ontario, February 5, 1965, pp. 1-2.

[2]Ibid.

education program activities; appraisals of health behavior in terms of health knowledge, health attitudes and health practices; and appraisals of the process of evaluation.[1]

The Evaluation Process

Although there does not seem to be complete agreement among the authorities in either education or public health on how the evaluation process should operate, they do agree that it is a circular process. As Fleck said, "The first principle is that evaluation as a process has no end."[2]

The definition of evaluation selected for this study was chosen because of its emphasis on process: "...It includes at least the following steps: Formulation of the objective, identification of the proper criteria to be used in measuring success, recommendations for further program activity."[3]

James and other public health authorities have identified the following steps in the process:

1) Goal setting.

2) Determining a measure of the goal.

---

[1] School Health Education Evaluative Study, Los Angeles Area 1954-1959 (Los Angeles: University of California, n.d.), pp. 128.

[2] Andrew C. Fleck, "Evaluation as a Logical Process," Canadian Journal of Public Health, LII (May, 1961), p. 191.

[3] "Glossary of Administrative Terms ...," American Journal of Public Health, L, No. 2, pp. 226.

3) Measuring the goal.

4) Identifying the goal-attaining activities.

5) Putting the goal-attaining activity into operation.

6) Appraising the effect of the goal.

7) The valuation. [1]

A review of the literature on evaluation in education, in public health, and in other social sciences, provided the concepts and constructs for the following framework for the evaluation process:

1) The Planning Phase:

   a) Defining the underlying assumptions inherent in the philosophical bases of the program.

   b) Defining the objectives and sub-objectives of the program.

   c) Clarifying and restating the objectives in more specific and behavioral terms.

   d) Formulating criteria to measure the attainment of the goals.

2) The Collection of Data Phase:

   a) Identifying specifications, the situations and the specific sources of evidence, to use in evaluation.

   b) Determining the factors that control the attainment of objectives and designing ways to assess their influence on the behavior being evaluated.

   c) Developing methods and techniques for the collection of the evidence.

   d) Collecting the data.

---

[1] James, American Journal of Public Health, LII, No.7, p. 1146.

3) The Application Phase:

a) Analyzing the evidence critically and interpreting it in relation to the objectives.

b) Validating the data compiled.

c) Determining changes indicated in both the processes and objectives.

d) Implementing the recommended changes.

Definition of the underlying assumptions inherent in the philosophical bases of the program, while an ideal starting point in prospective evaluation, is seldom easy in an ongoing program. While it is recognized that, "...The philosophy and objectives of the school and the characteristics and needs of its students together determine the nature of its program ...,"[1] it is more difficult to define the philosophy so as to provide, "...A framework of the basic principles of education which expresses the staff's convictions on such essential points as the scope of the school's responsibility for the education of youth, the nature of the educative process, the content and methods of instruction, desirable types of student activities, and the outcomes to be attained."[2]

---

1 National Study of Secondary School Evaluation, Evaluative Criteria 1960 Edition (Washington, D.C.: National Study of Secondary School Evaluation, 1960), p. 25.

2 Ibid.

It might be postulated that Canadian educators and public health workers would support, most if not all of, the following convictions as fundamental to the definition of objectives for the Canadian school health program:

1) Respect for the worth and dignity of every individual.

2) Acceptance of equality of opportunity for all children and youth.

3) Encouragement of variability.

4) Faith in man's ability, through the use of his intelligence, to make rational decisions.

5) Respect for moral and spiritual values and ethical standards of conduct.

6) Belief in health as a fundamental right of every human being.

7) Recognition of health as a valuable personal possession.

8) Faith that health can be protected, conserved, promoted, and improved if certain conditions are fulfilled.

9) Acceptance of prevention as including the prevention of occurence of disease and the prevention of progression of disease.

10) Belief that the health of every individual is a social concern and responsibility. The decision-making processes about education and about public health rest fundamentally with the people.

11) Faith that the knowledge of the health sciences can be applied through cooperation between an educated general public and enlightened governments.

12) Acknowledgement that the school has responsibility for teaching health as a part of the general education of all children and youth.

13) Concern that teamwork between educators and public health workers is essential in the protection and promotion of health among children and youth.

14) Belief that public health and education are correlated with one another and with the other social agencies and institutions in the community.

In British and Canadian education more emphasis seems to have been placed on an understanding of these values than on the definition of the objectives. A British educator, a representative of the school of analytic philosophers, speaking in Canada last year, questioned whether education should have aims at all, for he maintained that to have aims suggests an objective which is distant and which it is possible to fail to attain. He suggested that the aim of self-realization of the individual conceals many differences in valuation about important avenues of self-realization, and pointed out that the values become apparent in the particular information, skills, and traditions which society selects for passing on to its children, and in the teaching methods and procedures it approves.[1]

There are few objectives in the Canadian and the British public health literature other than very general statements of purposes. Benson and Beattie stated the following objectives of the school health program:

---

[1] Ontario Institute for Studies in Education, "Canada's First International Seminar in Philosophy and Education," Canadian School Journal, XLIV (April, 1966), p. 26.

1) To foster attitudes in the child which will help him to conserve and promote his own personal health, and to accept his appropriate responsibility for family and community health.

2) To protect the child from preventable disease and injury.

3) In co-operation with school personnel, to discover early and potentially harmful deviation from the normal, to encourage remedial measures and adaptation to any handicaps which cannot be corrected.

4) To make health information and teaching aids available to teachers.

5) To inspect the physical aspects of the school and report to the Board of School Trustees any condition that is not conducive to a safe and healthful environment.

6) To counsel children, parents and others on health matters.[1]

These emphasize the school health services, some aspects of the physical environment of the school, and the responsibilities of the professional health workers.

Phillips noted an observable trend in statements of Canadian educational objectives, "From an emphasis on form, stability, and differentiation in the interest of alleged superiority to an emphasis on activity, change and universality in the interest of alleged equality."[2]

American authorities have provided guidelines to clarify the definition of objectives. Rosenstock has pointed out that an overall

---

1 K.I.G. Benson and Alice Beattie, "A New Approach to the School Health Program," Canadian Journal of Public Health, LV (September, 1964), p. 373.

2 C.E. Phillips, The Development of Education in Canada, p. 428.

objective represents a desired value.[1] Each of these overall objectives has related to it a number of sub-objectives.[2] James has pointed out that evaluation should be applied to the lowest level objectives first, and then to the higher level objectives up the scale.[3] Getting and a team at the University of Michigan have developed a scheme for providing a systematic description of program objectives.[4]

Few, if any, of the overall objectives, or the sub-objectives, in the Canadian literature on school health would meet the five criteria for adequate specification to permit evaluation:

1) Is there a clear definition of the specific condition or the environment that is to be attained?

2) Is there a clear statement of the degree or amount of intended attainment?

3) Is there a clear statement of the time period in which this degree of attainment is expected?

4) Is there a clear specification of the geographical location of the program?

---

[1] Irwin M. Rosenstock, "Planning for Program Evaluation: Criteria, Methods, and Techniques," Paper read at the "Executive Process in Public Health Administration" Conference, School of Public Health, University of Michigan, May 5, 1966, pp. 9 - 10.

[2] Ibid, p. 7.

[3] James, American Journal of Public Health, LII, No.7, p. 1147.

[4] Procedures for Evaluating Health Programs, developed by the Research Program: "Evaluation of Public Health Practices." Department of Community Health Services, School of Public Health, University of Michigan (6th rev.; Ann Arbor, Mich.: School of Public Health, Nov. 19, 1965), pp. 69.

5) Is there a clear specification of the particular people or the portion of the environment in which the objective is to be attained? [1]

Emphasis on the behavioral nature of objectives reflects an attempt to counteract one of the major failings of many self-evaluation studies of school programs. Hagen and Thorndike said:

> When a total school program or school system in evaluated, the instruments usually take the form of check lists and rating sheets. Such devices have largely abandoned the appraisal of changes produced in students; they mix, in varying combinations, appraisals of the formal structure and organization of the school and appraisals of the processes that go on within it ... [2]

In their summary of research needs they listed the improvement of procedures for identifying the significant educational outcomes and translating them into observable student behaviors, and the development of more valid, more reliable, and more administratively flexible devices for appraising student behaviors. [3]

Some Postulates for Evaluation

Some of the writer's interest in the development of evaluative criteria was aroused by the "Evaluative Criteria" for secondary schools. The development of the criteria for secondary schools was traced back to the resolution of the Regional Associations and the

---

[1] Procedures for Evaluating Health Programs, p. 20.

[2] Elizabeth P. Hagen and Robert L. Thorndike, "Evaluation," Encyclopedia of Educational Research, edited by Chester W. Harris (New York: The Macmillan Company, 1960), p. 484.

[3] Ibid, p. 485.

Cooperative Study of Secondary School Standards in 1933. The processes for endorsement of the criteria were interesting but not appropriate to this study.[1] The 1939[2] and 1950[3] editions were reviewed. Changes in the 1960 edition suggested some guidelines:

1) Greater responsibility can be placed on the persons using the schedule in the development of the statements of philosophy and objectives.

2) The schedule should avoid implying a philosophy, in so far as possible.

3) The items should be as clear as possible, although it must be expected that there will not be uniform interpretation of all items.

4) The evaluation items should be relevant so as not to penalize the program which is justifiably different.[4]

Evaluative criteria for junior high schools were introduced by the National Study of Secondary School Evaluation in 1963.[5]

Lehker, in the development of criteria and a plan for evaluating

---

[1] Cooperative Study of Secondary School Standards, Evaluative Criteria and Educational Temperatures (Washington, D.C.: Cooperative Study of Secondary School Standards, 1939), pp. 175.

[2] _____, How to Evaluate a Secondary School, 1940 Edition (Washington, D.C.: Cooperative Study of Secondary School Standards, 1939), pp. xxiii + 139.

[3] _____, Evaluative Criteria, 1950 Edition (Washington D.C.: Cooperative Study of Secondary School Standards, 1950), pp. 305.

[4] National Study of Secondary School Evaluation, Evaluative Criteria 1960 Edition (Washington, D.C.: National Study of Secondary School Evaluation, 1960), pp. 5-6.

[5] National Study of Secondary School Evaluation, Evaluative Criteria for Junior High Schools (Washington, D.C.: National Study of Secondary School Evaluation, 1963), pp. 330.

and accrediting junior high schools, derived principles for authoritative educational literature which he used in the development of both criteria and a new process for their utilization. He proposed that these principles necessitated the use of two types of criteria: minimum standards, making use of objective measurements, and qualitative standards, making use of both objective and subjective measurements. He developed two instruments: one to determine the minimum standards, the other to measure the quality of the program, and plans for their utilization. He advocated the focus on an analysis of the quality of the school health program by the use of continued self-evaluation, and proposed a system of registration rather than accreditation.[1]

Evaluation of the Canadian school health program must be interdisciplinary and interagency in almost all situations. Some of the common problems in interdisciplinary studies have been stated by Brightman:

1) Lack of knowledge of what the other disciplines have to offer to the area of study.

2) Failure to use all disciplines concerned in initial planning.

3) Lack of effective communications between disciplines.

4) Human factors may well outweigh organizational factors. Personal or vested interests, and concern over sharing credits, are among many problems causing poor cooperation.[2]

---

[1] Roland John Lehker, "Criteria for the Evaluation and Accreditation of Junior High Schools," (unpublished doctoral dissertation, University of Michigan, 1963).

[2] I.J. Brightman, "Problems in Interdisciplinary Coordination and Communication," Ann. New York Academy Science, LXXIV (September, 1958), pp. 35 -- 39.

From a survey of the literature on evaluation, and the experiences of the writer, the following postulates for the evaluation of Canadian school health programs have been derived:

1) The evaluation should begin as a retrospective evaluation, at least in part, but should become an important part of a continuous development process in which the products of the evaluation are used in the replanning.
2) The evaluation should be interdisciplinary in nature. It should demonstrate the unique roles of school health in the total educational program and in the community public health program.
3) The evaluation should recognize both the British and the American influences on the Canadian school health program.
4) The evaluation should recognize the controls vested in the provincial and local departments of education and departments of health.
5) The development of the philosophy and objectives should be undertaken, at least in part, by the professional persons involved in the evaluation.
6) The evaluative criteria should not reflect a specific philosophy.
7) The evaluation should recognize the necessity for flexibility and adaptability in the individual school health program.
8) The evaluation should encourage long-range planning rather than transitory and expedient practices.

9) The evaluation should be comprehensive in nature providing for the appraisal of all aspects of the school health program.

10) The evaluation should establish:

    a) Minimum standards using objective measurements.

    b) Qualitative standards using both objective and subjective measurements.

11) The evaluation should appraise effort, performance and efficiency.

12) The evaluation should recognize the need for appraisal of behavior as well as structure, organization and processes.

13) The evaluation should be recognized as a professional responsibility requiring leadership familiar with evaluation and the school health program, and involvement of workers from all levels of both professional groups participating in the program.

14) The evaluation should provide means for changing and adapting the principles, criteria and specifications.

15) The evaluation should consider the relationships expressed between members of each team and members of both professional teams, and should point the way toward improved human relationships.

16) The evaluation should provide positive learning experiences for the staff members.

17) The evaluation should provide means for interpreting the results to the "publics" of the school and of the community health department.

18) The evaluation should stimulate research and innovation in school health.

The Application to the Design of This Study

The lack of any comprehensive set of objectives for Canadian school health programs led to this study, as a phase in retrospective evaluation, beginning with emphasis on the formulation of the criteria.

Although the Los Angeles Area School Health Education Evaluation Study began with the definition of objectives in terms of program activities and/or behavior, this seemed less appropriate in Canada where the definition of levels of objectives has received less attention.

Therefore, the formulation of criteria, one part in the planning phase of the circular evaluation process, was chosen as the starting point. It was recognized that this part was related to the other parts, and that ultimately, through the use of the endorsed criteria in a self-appraisal schedule, the process would come full circle to the redefinition of assumptions, the definition of objectives, and the subsequent redefinition of criteria.

The evaluative principles control the formulation of the criteria, and in part, the design of the survey procedures to determine their

applicability. They will influence also the subsequent proposals for redefinition of rejected criteria, and the proposals for their utilization.

As Grossman said, "...We need to work on the possibility of developing for the different levels and dimensions of our evaluation processes, sets of indicators which may help to give us clues as to how we are doing while we are still on the way and while we still have a chance to speed up or take the correct turn."[1]

---

1 Jerome Grossman, "Overcoming Barriers to Effective Evaluation of Education in Public Health Programs," California's Health, XIX (December 15, 1961), p. 83.

CHAPTER III

THE FORMULATION OF THE GUIDING PRINCIPLES AND CRITERIA FOR THE PREPARATION OF THE INSTRUMENT

The first step in developing the design of this study was to identify principles and criteria that could be incorporated into the survey instrument through which data could be collected. This necessitated an extensive review of the literature to differentiate between principles, objectives, criteria, and the specific measurements (specifications) to appraise each criterion, so that a sound framework for the data collection instrument could be established.

Although Freeman and Holmes suggested that each agency should develop its own standards,[1] surely there are standards, as Lehker and others suggested, that all comparable agencies should be striving to achieve, and other standards that are desirable but less essential as a baseline. It is assumed that the guiding principles and criteria should be applicable to most Canadian school health programs with the possible exception of a few criteria that may be more appropriate in urban than in rural areas (a differentiation that may almost disappear as the regionalization of schools is completed).

---

[1] Freeman and Holmes, p. 225.

The Selection of the Method for Formulating the Guiding Principles and Criteria for This Study

The major methods for formulating the principles and criteria for evaluation seem to be related to two basic approaches: their development by a multilevel committee, and their development from a review of selected literature followed by endorsement or rejection through the judgments of selected respondents.

While the writer agrees with Freeman and Holmes, that ideally, "The development of criteria is the joint responsibility of the experts within the service area, the administrative staff, and the field staff,"[1] this seems most appropriate in prospective evaluation when these persons are meeting to plan a new program.

In retrospective evaluation, the committee approach seems dependent upon:

1) Real enthusiasm on the part of the members of the committee in the tasks to be accomplished, coupled with faith in the committee approach.
2) Pre-session time for preparation on the part of the chairman and members.
3) The financial resources to bring such persons together for a period of time, (or for a series of sessions) appropriate to the tasks to be performed.

---

[1] Freeman and Holmes, p. 220.

When the tasks are complex and extensive, at least one appropriate person is needed, on a full-time basis, for the preparation of pre-study materials for the committee members, so that all are aware of what has been done by others. The committee approach is expensive if such factors as the preparation expenses, the travel and maintenance of the members, and the value of the time of the members, are taken into consideration.

The committee approach has been perfected in the United States. The opportunities for involvement in the committee method have been more restricted in both Canada and Great Britain. Of experience on one of the interdisciplinary committees on school health in the Five-Year Program in School Health Research,[1] a Canadian educator wrote, "...Though in favor of health I was shaken by five years' experience on a committee of doctors and educators who failed to agree on a single criterion for evaluating the effect of health instruction..."[2] Only two national committees, neither one comparable to the American Joint Committee of the National Education Association and the American Medical Association, and a few provincial committes, most of

---

1 A.J. Phillips, "A Five-Year Program in School Health Research," Canadian Education, V (June, 1950), pp. 1-12.

2 C.E. Phillips, "Effective Aims in Public Education," The Aims of Education (Ottawa: Canadian Conference on Education, 1961), p. 12.

which are curriculum committees, are in existence.[1]

The Executive Council of the Canadian Public Health Association has been trying to obtain a Policy Statement on School Health since 1962. The chairman, Dr. G.E. Wride, wrote a personal letter to the deputy-minister of health in each province, to the chairmen of the appropriate committees and sections of the association, and to selected health and other officials, to request, in confidence, frank opinions on school health services. The subsequent report was accepted, but not endorsed as the proposed policy statement, by the Executive Council.[2] In 1964, the Executive Council appointed Dr. J. Webb, Director of Maternal and Child Hygiene, Department of National Health and Welfare, to chair a national committee on school health, with power to appoint committee members. At the time of writing the committee members had not been appointed.[3]

The method of literature review, as the basis for the formulation of guiding principles and criteria, affords an opportunity for a system-

---

[1]The Joint Committee on School Health of the Canadian Medical Association and the Canadian Association of Health, Physical Education and Recreation, and the School Health Committee of the Canadian Health Education Specialists Society.

[2]Interview with Dr. G.E. Wride, Ottawa, April 13, 1965. The writer was given a copy of the Report to the Executive Council of the Canadian Public Health Association on School Health Services, October 26, 1963, (Multilithed), pp. 8.

[3]Jean F. Webb, Report of the School Health Committee, Canadian Public Health Association, May 31, 1965 (Mimeographed), pp. 2.

_____, Report of the School Health Committee, Canadian Journal of Public Health, LVII (September, 1966), pp. 426-27.

atic and thorough analysis of the reports and studies on the school health program. Although this method has been used most frequently by doctoral candidates, its recent use by Davis to determine the substantive findings in mental health education as a basis for further study,[1] may lead to further exploration of its values. Justification for its use is found also in the related studies by other investigators. The literature review is especially valuable in Canada where there has never been a comprehensive bibliography of Canadian reports and studies on the school health program.

Selected Related Studies

The method of literature review for school health was given impetus by the concept studies begun at Boston University. Professional books and student textbooks, professional and lay periodicals, vital statistics and related data, films, scientists' statements, and pamphlets were used as sources of concepts for surveys for the determination of concepts for health instruction.[2]

---

[1] James A. Davis, Education for Positive Mental Health (Chicago: Aldine Publishing Co., 1965), pp. xiii + 192.

[2] Wesley M. Staton, "A Determination of Fundamental Concepts of Healthful Living and Their Relative Importance for General Education at the Secondary Level," (unpublished doctoral dissertation, School of Education, Boston University, 1948) Condensed: Research Quarterly, XXII (March, 1951), pp. 3-27.

Charles D. Merrill, "A Determination of Concepts of Healthful Living Which are of Functional Value in Contributing to the General Education of Elementary School Pupils," (unpublished doctoral dissertation, School of Education, Boston University, 1949) Condensed: Research Quarterly, XXIV (December, 1953), pp. 423-41.

The most closely related study, in terms of the formulation of criteria, was that done by Nix who extracted criteria from the literature, submitted them to a jury of American and Canadian experts for judgment, and then developed a list that was used as the basis for an interview schedule to determine how teachers' concepts of a school health program agreed with these criteria, and whether length of teaching experience and type of professional preparation were factors in this agreement. The criteria were selected from reports of various American National Committees from 1945 to 1953. Data were obtained from a random sample of fifty teachers from the Toronto Public School system and fifty teachers from the Montreal Protestant School system in Grades 4, 5 and 6. Nix found that neither the length of experience, nor the type of professional preparation appeared to be a factor in the agreement, or lack of agreement, with the criteria in

---

Clifford Allen Boyd, "A Determination of Concepts of Healthful Living and Their Relative Importance for a General Course in College Health," (unpublished doctoral dissertation, School of Education, Boston University, 1950). Condensed: Research Quarterly, XXIII (May, 1952), pp. 177-197.

Arthur J. Giovannangeli, "The Selection, Development and Objective Evaluation of Concepts in Alcohol Education as an Aid to Curriculum Construction," (unpublished doctoral dissertation, Boston University, 1954).

Alexander F. Galarneaux, "The Selection, Development and Objective Evaluation of Tobacco Smoking Concepts as an Aid to Curriculum Construction," (unpublished doctoral dissertation, Boston University, 1957). Condensed: Research Quarterly, XXX (May, 1959), pp. 144-54.

the Toronto sample but there was indication that recency of training was of some significance in the Montreal sample. She concluded that the results showed a general lack of understanding of the comprehensiveness of a modern school health program, yet the fact that approximately half of the criteria were accepted by 50 per cent or more of the respondents indicated that there was a basis for future in-service training programs in school health in both systems.[1] The criteria used in this study applied primarily to these three grades. Less than half of the jurors were Canadian, and most of the jurors were in very senior administrative positions. Canadian literature was not used although the last of the seven reports of the Five-Year National Study on School Health had been published in 1950.[2]

A group of studies on the development of criteria for school health programs was done at Indiana University. Watters[3] and Kirk[4] selected health service criteria, and Wilson[5] selected criteria for

---

[1] Nix, pp. xiii + 258.

[2] A.J. Phillips, pp. 1-12.

[3] Ray Watters, "An Evaluation Instrument for the School Health Service Program," (unpublished doctoral dissertation, Indiana University, 1960).

[4] Robert Henry Kirk, "An Instrument for Evaluating College and University Health Service Programs," (unpublished doctoral dissertation, Indiana University, 1960).

[5] Harrison Benjamin Wilson, "An Instrument for Evaluating Health Instruction in Secondary Schools, Grades 9-12," (unpublished doctoral dissertation, Indiana University, 1960).

health instruction from the literature. Each of these investigators developed rating scales that were submitted to juries, refined and tested. Kirk recommended that such standards for evaluation should be reviewed, revised, rerated and reweighted at least every five years by a representative jury. These studies and other related studies were discussed with Dr. J. Keogh Rash of Indiana University who had acted as faculty advisor.[1] In 1965-66 these studies were brought together into an appraisal schedule for American school and college health programs.

Bonner used correspondence and interviews as well as a review of literature for the development of criteria for measuring environmental factors that affect the physical health of elementary school children.[2]

Anderson developed principles for the coordination status of health programs from the literature, his experience, and opportunities for coordination of activities of school health personnel.[3]

---

[1]Interview with Dr. J. Keogh Rash, New York City, October 3, 1964.

[2]Edward Bonner, "Measuring and Scoring Selected Environmental Factors that Affect the Physical Health of Elementary School Children," (unpublished doctoral dissertation, University of Utah, 1958).

[3]Gordon Wilcox Anderson, "An Evaluation of the Coordination Status of Health Programs in and among Eight Selected Central Schools of Broome County, New York," (unpublished doctoral dissertation, New York University, 1961).

Beyrer's study of the significance of current trends in school and college health programs was based on the identification of trends from a survey of the literature published in the field of school and college health education during the previous ten-year period. These trends were made into a check list and sent to school educators, public health educators, and general educators to assign value judgments on a three-point scale. The trends were ranked according to the judgments of the respondents.[1] The literature sources, the judgments on a three-point scale, and the ranking of the judgments were related to the design of the writer's study.

Fogoros determined tentative elements for a course in family life education to be taught in the senior grade of American high schools through analysis of syllabi in use in high schools, textbooks, supplementary literature being used in classrooms, and newspaper and magazine articles, and submitted these to representative high schools for revision. The revised elements were then submitted to a jury of experts for judgments on a four-point scale. Index values were determined as a means of acceptance or rejection of each element.[2]

---

[1] Mary K. Beyrer, "The Significance of Current Trends in School and College Health Programs," (unpublished doctoral dissertation, Ohio State University, 1959).

[2] Letitia Marguerite Fogoros, "Determination of Elements Desirable for a Course in Family Life Education for the Senior Year in High School," (unpublished doctoral dissertation, University of Michigan, 1961).

Related Self-Appraisal Instruments

The Superintendent of Public Instruction in Michigan published a check list for appraisal of the secondary school health program in 1946. A three-year sequence provided a means for recording progress during a definite period to serve as a guide for continuing program development.[1] The most recent revision was developed by the Health Education Curriculum Committee of the Michigan Department of Health in the early 1960's. This was intended for the use of the administrator and the teaching staff to identify general strengths and weaknesses of the program, to evaluate the program as a whole, to develop plans for improvement and to serve as a discussion guide in curriculum planning.[2] This instrument interested the writer in the development of a Canadian counterpart which could be used by teachers, public health workers, and their administrators, in the evaluation of the school health program as a device for program development and in-service education.

The Texas Education Agency assisted a committee of educators in the development of a guide of standards for appraising elementary

---

[1] Superintendent of Public Instruction, A Check List for Surveying the Secondary School Health Program, Bulletin 340 (Lansing, Mich.: Department of Public Instruction, 1946), pp. 16.

[2] _____, Self-Appraisal of the Health Program in Michigan Schools, Bulletin 1030 (Lansing, Mich.: Department of Public Instruction, n.d.), pp. 29.

and secondary school health programs. This was compiled as a check list to provide a means for administrators to evaluate health programs in relation to accepted school health practices.[1] The writer believes that not only administrators, but also those actually involved in the conduct of the program should participate in the evaluation.

The Ohio Department of Health and Department of Education developed guidelines for use by school staffs and local department of health personnel as a means of providing basic criteria for appraising the effectiveness of the three major components of the school health program. This guide consisted of a series of questions which, if answered affirmatively, indicated a desirable health program.[2]

Oregon State University developed a School Health Program Evaluation Scale in 1959 to appraise school health services, health instruction and healthful school living. This scale was developed in terms of recognized procedures, practices, standard facilities, and activities on the inference that if a school health program possesses certain attributes the health objectives will be attained. It was claimed to be reasonably objective although a degree of subjectivity is inherent

---

[1] Texas Education Agency, A Check List: Appraising the Elementary and Secondary School Health Program (Austin, Texas: Texas Education Agency, 1951), pp. 28.

[2] Ohio Department of Health, "Ohio's Check List for Evaluating the School Health Program, "Ohio's Health," IV (August, 1952), pp. 12.

in some of the items. It was intended to be applicable to urban and rural schools, and to small, medium and large school systems. A review board of experienced health educators contributed to the development of this scale.[1] While this is a very comprehensive scale, some of the specifications, for example, the foot-candles of light for desk level, stairways, entrances and corridors are lower than those advocated currently in Canada. Lack of familiarity with numerical weighting would be a deterrent to the use of this scale in Canada.

In 1962 the Michigan School Health Association produced an appraisal form to define needs and to assist in planning for improvement. This instrument was designed to be used by local school staffs, by school health councils, by professional health workers, and by other interested groups in conjunction with other instruments provided by the state departments of education and public health. In this preliminary schedule the emphasis is on the evaluation of school health services.[2] This is a more detailed schedule than the publication of the state department of education.

---

[1] C.L. Anderson, School Health Practice (St. Louis: C.V. Mosby Co., 1964), pp. 468-69 and pp. 532-41.

[2] Committee on Appraisal of School Health Programs, Preliminary Report, An Appraisal Form for Studying School Health Programs (Revised 1961-62; Lansing, Mich.: Michigan School Health Association, 1962), pp. 40.

The Selection of Sources for the Guiding Principles and Criteria for This Study

Although a wide range of Canadian, British and American literature was reviewed, in the selection of the sources for the guiding principles and criteria, attention was focussed on authoritative professional literature in education, in public health, and in school health. The relative prestige of the author, editor, or group responsible for publication, was one basis for selection. Priority was given to primary sources rather than secondary or tertiary sources where rewriting might have altered the intention of the original author. Although the date of publication was given less attention than in some of the related studies, the guiding principles and criteria from older sources were used, with very few exceptions, only as a check on more recent editions of the principles and criteria. In this review, most of the publications prior to 1955 are included only in Appendix A in the annotated bibliography on the development of Canadian school health programs.

Selected Canadian Sources

Most of the Canadian sources of guiding principles and criteria were reports of commissions and reports of studies.

The most outstanding source was the transcriptions of the submissions to, and the hearings of, the Royal Commission on Health

Services in 1961. Leaders in provincial and municipal departments, in professional associations in public health, education, and related fields, in various departments of universities and colleges, and in the voluntary health and social agencies, spent many months preparing these submissions. Every conceivable aspect of school health was described and recommendations were made. The transcriptions of the discussions between the commissioners and the petitioners clarified and supplemented the briefs.[1]

The report on organized community health services, requested by the Royal Commission on Health Services, included a review of school health programs in the context of community health services illustrated by case histories of the health facilities in four areas of Ontario, which provided principles and criteria.[2]

Reports of the Canadian Public Health Association, especially the report on the federal and provincial health services included some principles and criteria for school health programs.[3] The previously mentioned report of the Committee on Public Health Practice,[4] and

---

[1] Transcriptions of the Hearings of the Royal Commission on Health Services, 68 volumes (Toronto: The Canadian Pharmaceutical Association, 1961), pp. 13, 194.

[2] Hastings and Mosley, pp. xx+328.

[3] R.D. Defries (ed.), The Federal and Provincial Health Services in Canada (2nd ed., rev.; Toronto: The Canadian Public Health Association, 1962), pp. 141.

[4] Committee on Public Health Practice, 1963, pp. 8.

the first report of the Committee on School Health,[1] provided some principles.

Research done within universities resulted in a few reports valuable as sources for this study. A survey of health unit services in eight of the provinces of Canada was undertaken by the School of Hygiene, University of Toronto, and the Department of National Health and Welfare, in 1960, to obtain basic information concerning the functions of health units and the opinions of the medical officers of health concerning the programs. Inherent in the findings about school health services were principles and criteria for health education and for healthful school living, as well as for health services.[2] The McCreary survey of facilities, referred to in Chapter I, was undertaken at the University of British Columbia, and contributed some criteria for the provision of health services, for screening tests, and for immunization.[3]

A group of provincial and local studies of health programs served as sources. A study of the maternal and child health services in Ontario provided principles and criteria for health services.[4] The

---

[1] Webb, 1965, pp. 2.

[2] Canada, Report of the Survey of Health Unit Services ..., pp. 44-48 and 91-92.

[3] McCreary, pp. 10-13.

[4] G.K. Martin and K.B. Ladd, "Maternal and Child Health Services, Ontario, 1958," Canadian Journal of Public Health, LI (March, 1961), pp. 111-19.

report of a survey of the provincial department of health in Nova Scotia contributed principles and criteria, especially for a provincial inter-departmental committee, for involvement of the family physician, and for extension of services.[1] A more recent survey of the health departments in and around Halifax, Nova Scotia, provided adaptations of the above for the community level and introduced criteria for provisions for exceptional (handicapped) children.[2] Criteria for safety and accident prevention were found in the reports of the Saskatchewan Department of Health, and a recent study of the hazards in eighty rural schools.[3]

A report of a provincial sub-committee of the Canadian Medical Association,[4] and a report of a sub-committee of a medical society,[5] provided criteria for health instruction of pupils.

---

[1]Milton H. Brown and Cope W. Schwenger, Report on the Survey of the Programme of the Department of Public Health, Province of Nova Scotia, 1961 (Mimeographed), pp. 32-34.

[2]Vlado A. Getting, Study of Administration and Programmes of Health Departments of Halifax, Dartmouth and Municipality of Halifax County, Nova Scotia (Halifax: Nova Scotia Department of Public Health, 1963), pp. vi+263.

[3]Many Hazards in Rural Schools," Health Newsletter XV (July 15, 1964), pp. 3-4.

[4]Report of the Sub-Committee on Health Education in Schools of the Committee on Physical Education and Recreation to the General Council at the Ninety-Seventh Annual Meeting of the Canadian Medical Association, Vancouver, B.C., June 22-24, 1964, pp. 50-52.

[5]British Columbia Medical Association, Subcommittee on School Health Education, Report of a Survey on School Instructional Health Programme, revised September 1964 (Mimeographed), pp. 10.

Palko's survey of the preparation of elementary school teachers in health and health education supplied principles and criteria for professional preparation.[1]

The reports of the two national conferences on education served as sources for a few principles and criteria.[2]

The reports of the Royal Commissions on Education in Alberta[3] and in British Columbia[4] were important sources of criteria for health instruction, teacher preparation, and health services. The report of the Nova Scotia Royal Commission on School Construction served

---

1 Michael E. Palko, "Highlights of a Report on the Preparation of Elementary School Teachers in Canada in Health and Health Education," Canadian Journal of Public Health, LVI (May, 1965), pp. 207-09.

2 George G. Croskery and Gerald Nason (eds.), Addresses and Proceedings of the Canadian Conference on Education (Ottawa: Mutual Press, 1958), pp. 591.

Fred W. Price (ed.), The Second Canadian Conference on Education: A Report (Toronto: University of Toronto Press, 1962), pp. 409.

3 Alberta, Report of the Royal Commission on Education (Edmonton: Queen's Printer, 1959), pp. 115-217.

4 British Columbia, A Précis of the Report of the Royal Commission on Education in British Columbia (Victoria, B.C.: Queen's Printer, 1960), pp. 119.

as the major source of principles and criteria for the physical environment of the school buildings and grounds.[1]

Millar's brief to the Alberta Royal Commission on Education was an important source of criteria for health instruction.[2]

Recent studies undertaken by the Research Division of the Canadian Education Association provided some criteria.[3]

A survey of the problems of female rural elementary teachers in schools with four or less teachers, by the Federation of Women Teachers' Associations of Ontario, suggested criteria for provisions for exceptional (handicapped) pupils, for the physical environment of the school, and for the provision of teaching aids and resource materials.

---

[1]Nova Scotia, Report of the Royal Commission for School Construction in Nova Scotia (Halifax Queen's Printer, 1958), pp. 83.

[2]G.J. Millar, Health Education in Alberta Schools: A Submission to the Royal Commission on Education for the Province of Alberta. Presented in Edmonton, May 18, 1958 (Mimeographed), pp. 203.

[3]Canadian Education Association, The Status and Role of School Psychologists in Canada (Toronto: Canadian Education Association, 1964), pp. 15.

_____, The Present Status of Sex Education in Canadian Schools (Toronto: Canadian Education Association, 1964), pp. 22.

[4]Education Studies Committee, Federation of Women Teachers' Associations of Ontario, "A Survey of the Problems of Female Rural Elementary School Teachers in Ontario," Canadian School Journal, XL (August-September, 1962), pp. 341-43.

Almost the only source of the recognition of the importance of health interests of students was a health interest survey in Toronto Board of Education Schools, a comparison with the Denver studies,[1] which revealed both similarities and differences in health interests, and concluded that the health interests of these pupils were related to highly specific and immediate problems.[2]

Most of the recent Canadian studies of student health habits and practices have been studies of food habits and studies of smoking. The studies of the Toronto Nutrition Committee,[3] as well as those by Trenholm and Milne,[4] revealed the prevalence of poor eating habits. Morison and Medovy reported from a study of smoking and school achievement that smoking is inversely related to academic

---

[1] Denver Board of Education, Health Interests of Children (Denver Board of Education, 1947), pp. x + 121.

_____, Health Interests of Children, 1958 (Mimeographed), pp. 63.

[2] Research Service, A Health Interest Survey of Students in Toronto Board of Education Schools (Toronto: Board of Education, 1965), pp. 92.

[3] Jill Armstrong et al, "A Report on the Food Habits and Physical Activities of Grade Nine Students in Metropolitan Toronto," Journal of the Canadian Association for Health, Physical Education and Recreation, XXX (August-September, 1964), pp. 20-24 and p. 32.

[4] M. Trenholm and H. Milne, "Studies of Teenage Eating in Ontario. I. Evaluation of Teenage Food Selection," Canadian Journal of Public Health, LIV (October, 1963), pp. 455-462.

achievement.[1] Barrett in his survey of Calgary's senior high school students found that smokers rated poorly in organized sport and very poorly academically.[2] Morison reported that smoking was negligible before eleven years of age and the most rapid increment occurred between twelve and sixteen years of age.[3,4] Both Barrett and Morison reported a relationship to parental example: boys smoked more if either parent or both parents smoked, and girls were more influenced by the smoking habits of their mothers.

The copies of the minutes of the interdepartmental and interprofessional curriculum committee meetings in one province, and its supporting documents, were reviewed. Other unpublished reports and the provincial and local manuals of service were used as checks on the principles and criteria derived elsewhere.

---

[1]James B. Morison and H. Medovy, "Smoking Habits of Winnipeg School Children," Canadian Medical Association Journal, LXXXIV (May 6, 1961), pp. 1006-12.

[2]Kevin A. Barrett, "High School Students' Smoking Habits," Canadian Journal of Public Health, LIII (December, 1962), pp. 500-06.

[3]James B. Morison, et al, "Health Education and Cigarette Smoking: A Report on a Three-Year Program in the Winnipeg School Division, 1960-1963," Canadian Medical Association Journal, LXXXVII (July 11, 1964), pp. 49-56.

[4]James B. Morison, "Cigarette Smoking: Surveys and a Health Education Program in Winnipeg, Manitoba," Canadian Journal of Public Health, LV (January, 1964), pp. 16-32.

The issues of the Canadian Journal of Public Health, the Journal of the Canadian Association for Health, Physical Education and Recreation, Canadian Education (renamed in 1961 the Canadian Education and Research Digest), the Canadian School Journal, and the Canadian Medical Association Journal were reviewed for the period 1950-1964.

Selected British Sources

A professional textbook on school health services presented principles and criteria in the light of the development of school health services in Britain, in terms of the relationship of school health services with the National Health Scheme, and with emphasis on the need for greater teamwork with the general practitioners and the hospital services.[1] A textbook on health education contributed principles and criteria for health instruction.[2]

The handbook on school administration, an official publication of the National Union of Teachers, contained sections on school health, school safety, curriculum, special education, teacher preparation and conditions of services which suggested principles and criteria considered

---

[1] S. Leff and Vera Leff, The School Health Service (London: H.K. Lewis and Co. Ltd., 1959), pp. vii +316.

[2] Cyril Bibby, Health Education: A Guide to Principles and Practice (London: William Heinemann, Ltd., 1955), pp. x + 222.

important by British educational administrators and teachers.[1]

The Report of a Joint Committee of the Central and Scottish Health Services Councils on Health Education, chaired by Lord Cohen of Birkenhead, contained a chapter on health education in schools, a source of principles and criteria.[2]

Some of the recent reports of the Chief Medical Officer for the Ministry of Education were reviewed.[3]

A special report of the Education Committee of the Hampshire County Council on health education in the schools was a source of criteria for health education.[4]

The issues of Health Education, the journal of the British Council for Health Education, The British Medical Journal, The Medical Officer, and Lancet were reviewed for the period 1950-1964.

---

[1]The National Union of Teachers, School Administration: A Handbook of Advice and Information (Liverpool: Charles Birchall and Sons Ltd., 1964), pp. B 6/1 - 8/1, C 9/1 - 16/3, G 29/1 - 33/1 and I 36/1 - 40/6.

[2]Ministry of Health, Report of a Joint Committee of the Central and Scottish Health Services Councils on Health Education (London: Her Majesty's Stationery Office, 1964), pp. 72-74.

[3]Chief Medical Officer, Reports to the Ministry of Education (London: Her Majesty's Stationery Office, 1958-59 to 1963-64.)

[4]Report of the Working Party, Education Committee, A New Approach to Health Education in the Schools, Hampshire County Council, January 1964, pp. 18.

Selected American Sources

Most of the professional textbooks on school health, used as sources of principles and criteria, were American.

The books and reports of the following committees were used: The Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, The Interprofessional Committee of the American Association for Health, Physical Education and Recreation and the National Education Association, The Committee on School Health of the American Academy of Pediatrics, and The National Committee on School Health Policies of the National Education Association. A number of yearbooks of these and other associations were reviewed.

The reports of the 1960 White House Conference on Children and Youth were studied.[1]

Criteria for school health services were supplied by the review of more than a thousand studies made by Price.[2]

---

[1]United States, White House Conference on Children and Youth, Golden Anniversary, 1960. Recommendations: Composite Report of Forum Findings. (Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office, 354, 1960), pp. x+ 85.

[2]Bronson Price, School Health Services - A Selective Review of Evaluative Studies (Washington, D.C.: Department of Health, Education and Welfare, 1957), pp. 149.

The monograph of the Health Education Division of the American Association for Health, Physical Education and Recreation in cooperation with the School Health Education Study, a review of completed research on health instruction,[1] served as an important source of criteria for health education.

The most outstanding sources of principles and criteria for pupil health instruction were the reports of the American Nationwide Study of Health Instruction in the Public Schools, the School Health Education Study.[2]

Seventy-four doctoral dissertations for the period from 1953 to 1962 were reviewed.[3]

The issues of the Journal of School Health, the American Journal of Public Health, and Public Health Reports were reviewed for the period 1950-1964.

---

[1]C. Harold Veenker (ed.), Synthesis of Research in Selected Areas of Health Instruction (Washington, D.C.: The School Health Education Study, 1963), pp. 192.

[2]School Health Education Study, Summary Report of a Nationwide Study of Health Instruction in the Public Schools 1961-1963 (Washington, D.C.: The School Health Education Study, 1964), pp. 74.

_____, A Report on the School Health Education Study, September 25, 1965 (Washington, D.C.: The School Health Education Study, 1965) pp. 9.

[3]Margaret C. Cahoon, "An Analysis of Doctoral Dissertations on School Health from 1953-1962," Unpublished paper submitted in partial fulfillment of the requirements in Education D 773: Seminar in School Health Education, University of Michigan, July 31, 1963, pp. 59.

A number of international reports, especially the technical report of World Health Organization on teacher preparation, and the report of the 1960 World Conference of Organizations of the Teaching Profession, were used as checks on the principles and criteria from the Canadian, British and American literature. Other reports from World Health Organization on health education and maternal and child health were reviewed.

In summary, about one hundred volumes of professional books and reports, over twenty-five other reports, a number of public documents, and the issues of 12 periodicals for the period 1950-1964, were reviewed as the sources of the principles and criteria for this study. These sources are presented as a bibliography in Appendix E.

World Health Organization, Teacher Preparation for Health Education, Report of a Joint WHO/UNESCO Expert Committee, Technical Report Series No. 193 (Geneva: World Health Organization, 1960), pp. 19.

International Council on Health, Physical Education and Recreation of the World Conference of Organizations of the Teaching Profession, Amsterdam International Congress, July 28-30, 1960 (Washington, D.C.: International Council on Health, Physical Education and Recreation, 1960), pp. 36.

Formulation of the Principles and Criteria

In the analysis of the selected sources the principles, objectives, criteria, and specifications were recorded on index cards with their sources. Nearly six months of full-time work was devoted to this phase of the study.

The cards were grouped on the basis of the concepts and constructs inherent in them. These were synthesized into general principles, guiding principles, and criteria for Canadian school health programs.

To eliminate overlap and duplication, each criterion was examined in terms of:

1) Its potential relevance for Canadian school health programs.
2) Its measurability: the presence of objective, subjective or inferential indices.

The objectives were used as a cross-check on the general principles, the guiding principles, and the criteria. This revealed an important problem in the use of the objectives as a starting point in evaluation: there tends to be almost inevitable overlap with the use of the objectives. For example, in many areas there would have to be at least one objective on professional preparation, whereas in the organization of criteria it is possible to bring these together into one group.

The specifications were matched with the criteria.

This process led to a framework of general principles, guiding principles and criteria.

The Principles

As stated in the definitions and their usage, in Chapter I, the general principles are the translations of the overall objectives or statements of purpose, the value-oriented objectives. Each might be used as the first proposition of an argument from which a guiding principle and its related criteria may be deduced. The general principles are used also for the organization of, and as an aid in the interpretation of, the guiding principles and criteria.

The general principles include:

1) The school health program is based in the social and health sciences.

2) The school health program is a dynamic educational program that emphasizes constructive action in the shaping and reshaping of behavior for better health.

    a) The school health program helps each pupil progressively to build a more comprehensive and definite scheme of values which encourages him to accept responsibility for the creation and maintenance of conditions which contribute to his health, to the health of his family, and to the health of the community.

b) The experiences that enable the pupil to develop his abilities for self-responsibility toward improved individual and group health grow out of the discovery and appraisal of health needs of the individual and the group.

c) The context of health learning is established and taught in the context of the lives students live, to enable them to learn to solve the problems which change inevitably produces.

d) Health is an integral part of the administrative context and curriculum at every level, and is a part of the general education of all students.

3) The Canadian school health program is interdepartmental in organization, and recognizes the authority, responsibilities and controls vested in provincial, regional, and local boards of education and boards of health.

4) Each of the component parts of the school health program, healthful school living, health education, and health services, is comprehensive, and the three component parts are interdependent.

5) The school health program is coordinated with parental responsibility for the health of the children and youth.

6) The school health program is coordinated with community health programs and resources, is preceded by prenatal, maternal, infant and preschool health programs, and is followed by appropriate adult health programs.

7) The school health program is flexible and adaptable to neighborhood, community and regional conditions.

8) The selection, preparation, and development of professional and auxiliary personnel are fundamental to the educative processes and programs in school health.

   a) A comprehension of health as "physical, emotional and social well being" is a prerequisite for all professional personnel in the development and maintenance of school health programs.

   b) The health of all personnel involved with pupils is important in their efficiency and to their effectiveness, as well as for the protection and promotion of the health of the pupils.

9) The conduct of the total school health program requires the competencies of many professional health and education specialists assisted by capable auxiliary personnel, working together in a cooperative manner to achieve common goals.

   a) Clearly defined roles and responsibilities are essential for effective and efficient operation of the school health program.

10) The crucial factor in the planning and operation of the school health program is the quality of leadership.

11) There is effective communication among professional personnel, with auxiliary personnel, and with related groups including parents.

12) Long-range, anticipatory planning, and evaluation are essential for the efficient and effective operation of the school health program.

The eight guiding principles are more definitive than the general principles. Each of the guiding principles has inherent in it elements that are related to the associated criteria.

The guiding principles and the criteria are stated in Appendix F. Each guiding principle is capitalized and roman numerals are used.

The Criteria

The criteria are the standards or norms that should be required, or are highly desirable, to fulfill the objectives of the program. These were organized, under the eight guiding principles, according to the following outline:

Part A - The Nature and Organization of the School Health Program

Part B - Healthful School Living
- The Health of School Personnel
- The Emotional and Social Environment
- The Physical Environment
  - Control Measures
  - Practices
- Safety and Accident Prevention Within the Buildings and Grounds
- Safety and Accident Prevention on the Way to and from School
- School Lunch Facilities and Services

Part C - Health Education
- Pupil Instruction
  - The Planning and Conduct of Health Instruction
    - Nature and Types of Health Instruction
    - Correlation with Other Subjects
  - Personnel for Health Instruction
    - Teacher Involvement
    - Health Personnel
  - Topical Content Areas
- Professional Preparation for School Health and Health Education
- Continuing Education for School Health and Health Education

Part D - School Health Services
- Nature and Organization
- Planning of Health Services
- Health Service Personnel
- Health Appraisals
  - Screening Tests
  - Medical Examinations
  - Dental Health Services
  - Mental Health Services
  - Cumulative Health Records
  - Counseling and Follow-Up Services
- The Prevention, Detection and Control of Communicable Diseases
- Plans for the Provision of First Aid and Emergency Care
- Facilities for Health Services
- Provisions for Exceptional (Handicapped) Pupils

In a very few instances there was a slight overlap in criteria, for example, on the prevention of tuberculosis, which was inevitable if it was recognized that the parts might be used separately, as well as together. This slight overlap was planned also as an aid in determining the consistency in the judgments of the respondents.

The Design of the Instrument

The guiding principles and criteria were organized into an interview schedule-questionnaire instrument[1] to obtain the value judgments of the respondents as to whether each guiding principle and each criterion was "definitely applicable," "possibly applicable," or "definitely not applicable," as a guideline for the planning, development, and maintenance of school health programs in Canada.

It was designed for each respondent to modify any of the guiding principles or criteria that he deemed advisable, and to add criteria that he believed should be included.

A few items of a halfway nature were included so that if some of the criteria were rejected it might be possible to determine whether the respondents would accept a modification. For example, the respondents were asked to make a judgment on:

> The medical officer of health and/or the public health inspector should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation and safety:
>
> a) On an annual basis.

While this is current practice in some provinces, there have been some suggestions that a less frequent inspection might be permissible, especially with new schools, so the following was added to determine the extent of this opinion:

> b) Less frequently unless requested.

---

[1] A copy of this instrument is included as Appendix C.

The instrument was pretested, to a degree, on colleagues in the University of Toronto and in the East York-Leaside Health Unit to try to determine whether each guiding principle and each criterion was understandable to most professional workers.

CHAPTER IV

THE COLLECTION AND TREATMENT OF THE DATA

The development of the instrument used in the collection of the data, described in the previous chapter, was the first step in the method of investigation. The selection of the respondents, the administration of the data collecting instrument, and the methods used in the treatment of the data are described in this chapter.

The Selection of the Respondents

A population of persons involved in selected leadership activities in school health was sought. A list of 117 names was derived from the review of the Canadian literature, committee membership lists and reports, and calendars of the institutions preparing students in education and public health. Experienced colleagues reviewed this list in an attempt to detect omissions. This group was not too large to be surveyed in total. The respondents in this study were those professional workers who are, or have been, involved in one or more of the following leadership activities:

1) Research on, or related to, school health.

2) Publication on, or related to, school health.

3) Committee work on, or related to, school health.

4) Teaching school health or health education to students in colleges of education, schools of hygiene, and those schools of nursing where public health nurses are prepared.

A few reports gave no indication of who had been involved which suggested that there might be some less visible persons, so each of the 117 persons was asked to nominate one or two others who should be involved in this study. Most of those nominated were on the original list but 28 persons were not known. Thirteen of these persons were in public health and 15 were in education (10 of the 13 in public health and 7 of the 15 in education responded).

Testing the Instrument and Method

To test the instrument and the practicality of the method, it was decided to interview about twenty persons in five provinces, all of whom were members of the population. The duration of an interview averaged about four hours. Each interviewee was asked if he would have completed this lengthy instrument if he had received it by mail, and each agreed that he would have done so.

During the interviewing the wording of the items in the instrument was considered carefully to determine if any changes were necessary. None were indicated. The interviewees gave more information about their preparation for, and their experience in, school

health programs than the investigator had expected. Since much of this information substantiated their positions as members of this population, it was considered desirable to seek such information from the other respondents. Thus the personal data sheet was made more explicit in terms of the respondents' preparation and previous experience before the questionnaire was mailed.

At the conclusion of the interviewing the data were coded, punched, and analyzed to the degree that it was clear that it could be handled as planned.

Although the instrument was lengthy, it seemed that interest was high, so the collection of data by mail questionnaire was a reasonably feasible alternative to interviewing.

The Collection of the Data

Each of the 117 persons on the list of potential participants, and the 28 nominees, were invited to participate in this study.

The response according to the profession of the respondents is shown in Table 1.

TABLE 1

THE RESPONSE ACCORDING TO THE PROFESSION OF THE RESPONDENTS

Profession	Invited to Participate		Participated		Response
	No.	Pct.	No.	Pct.	Pct.
Educators	63	43	52	41	83
Public Health Workers	82	57	74	59	90
Total	145	100	126	100	87

This high response reflected the interest in this particular subject, and probably the sponsorship of this study by the Department of Public Health, School of Hygiene, University of Toronto. The use of criteria for selection of the respondents may have influenced the response. The personal invitation to participate may have stimulated a more favorable reaction from the respondents than may be expected when the approach is made to an agency or institution.

Although the writer would have preferred to have collected all of the data by interview this was not feasible since the respondents represented every province. The manner in which the data were collected is shown in Table 2.

TABLE 2

THE MANNER IN WHICH THE DATA WERE COLLECTED

Manner of Collection	Educators		Public Health Workers		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Entirely by interview	6	12	16	22	22	17
Partially by interview, completed by questionnaire	7	13	3	4	10	8
Introductory interview, completed by questionnaire	8	15	18	24	26	21
Entirely by questionnaire	31	60	37	50	68	54
Total	52	100	74	100	126	100

Seventeen per cent of the respondents were interviewed, 8 per cent were interviewed on one, two or three sections of the instrument and completed at least one section by questionnaire because of conflicting appointments when the interviewer was in the area. With 21 per cent there was an informal, introductory interview after which the respondent completed the questionnaire. The data were collected from 54 per cent of the respondents by mailed questionnaire.

In the coding, the responses were watched carefully to ascertain whether there were any evident patterns of difference between those who were interviewed, and those who replied by questionnaire. Since there was no apparent difference no comparative analysis was undertaken.

It was anticipated that not all of the data to be collected by questionnaire would be obtained unless follow-up measures were planned. A post card was designed to be completed and returned to provide information about when the questionnaire might be returned. A personalized form letter was used for subsequent follow-up. Table 3 shows the return of the questionnaires in relation to the follow-up measures.

TABLE 3

RETURN OF THE QUESTIONNAIRES IN RELATION TO THE REMINDERS

Reminder	Educators		Public Health Workers		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Without any reminder	26	57	45	78	71	68
After reminder card only	9	20	1	2	10	10
After card and first letter	8	17	10	17	18	17
After second letter	3	6	2	3	5	5
Total	46	100	58	100	104*	100

*The data were obtained from the other 22 respondents by interview.

Over two-thirds of the questionnaires were returned within a month without any follow-up being necessary. The follow-up card was mailed at the end of a month, if the questionnaire had not been returned, to determine when the return could be expected. About a month later, a personalized form letter was sent to each of the respondents who had not returned the questionnaire or the card. A

second follow-up letter was sent at the beginning of January 1966.

A total of 104 questionnaires were returned (data were collected from the other 22 respondents entirely by interview). One questionnaire was reported lost, another was received after the data were analyzed. There were only seven refusals. Ten persons in the population were not heard from.

The degree of completion of the schedule by sections is shown in Table 4.

TABLE 4

COMPLETION OF THE SCHEDULE BY SECTIONS

Section	Educators		Public Health Workers	
	No.	Pct.	No.	Pct.
One section only	0	0	1	1
Two sections only	0	0	1	1
Three sections only	3	6	0	0
All four sections	49	94	72	98
Total	52	100	74	100

Only two individuals completed less than three of the four parts, and only three individuals completed only three parts.

The data were collected between June 1965 and January 1966. This six-month period was unavoidable because of the time of year the data had to be collected, and the inclusion of the nominees.

The Respondents

As already shown in Table 1, 41 per cent of the respondents were educators and 59 per cent were public health workers.

The provincial and national distribution of the respondents is shown in Table 5.

TABLE 5

RESPONDENTS' PROVINCIAL AND NATIONAL DISTRIBUTION

Province	Educators		Public Health Workers		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
British Columbia	6	12	6	8	12	10
Alberta	3	5	5	7	8	6
Saskatchewan	5	10	5	7	10	8
Manitoba	4	8	5	7	9	7
Ontario	20	38	39	52	59	47
Quebec	5	10	1	1	6	5
New Brunswick	5	10	5	7	10	8
Nova Scotia	2	3	2	3	4	3
Prince Edward Island	1	2	2	3	3	2
Newfoundland	1	2	1	1	2	2
National	0	0	3	4	3	2
Total	52	100	74	100	126	100

The distribution of the respondents was related to their involvement in one or more of the selected leadership activities, rather than to representation by province, but there were some persons at this

leadership level in education and in public health from each province. The larger numbers from some provinces may be related to opportunities for involvement in research, in committee work, and in teaching. Ontario has the national capitol, its provincial capitol, the largest number of universities, and about one-third of the population, so the opportunities for involvement seem to be considerably greater than in some of the other provinces.

The types of preparation of the respondents are shown in Table 6.

TABLE 6

THE TYPES OF PREPARATION OF THE RESPONDENTS

Type of Preparation	No.	Pct.
Dual Preparation	28	22
Education Preparation	39	31
Public Health Preparation	59	47
Total	126	100

Of the 22 per cent who had had dual preparation, 15 were public health workers with at least one year of graduate work in education, and 13 were educators with at least one year of graduate work in health.

Most of the respondents had received their preparation in Canada, although some had received part, or all of it, in the United

States, Great Britain, or other countries.

The approximate total number of years of experience of the respondents is shown in Table 7.

TABLE 7

THE APPROXIMATE TOTAL NUMBER OF YEARS OF EXPERIENCE OF THE RESPONDENTS

Approximate Number of Years	Educators		Public Health Workers		Total	
	No.	Pct.	No.	Pct.	No.	Pct.
Under 5 years	3	6	2	2	5	4
5 - 9 years	2	4	8	11	10	8
10 - 19 years	18	35	25	34	43	34
20 years and more	27	51	39	53	66	52
Not ascertained	2	4	0	0	2	2
Total	52	100	74	100	126	100

Almost one-half of the respondents had less than 20 years of experience: 12 per cent had under 10 years of experience.

More than two-thirds of the respondents had been in their present positions less than 10 years.

The range of involvement of the respondents is shown in Table 8. Group I includes those who had had experience in three or more of the leadership activities, they constituted a multiple involvement

group. Those who had had experience in only one or two of the leadership activities are in Group II.

TABLE 8

THE RANGE OF INVOLVEMENT OF THE RESPONDENTS

Involvement Group	No.	Pct.
Group I	41	33
Group II	85	67
Total	126	100

One-third of the respondents were involved in three or more of the leadership activities.

Over one-quarter of the public health respondents held positions at the provincial level, and one-fifth had positions in colleges or universities. Only 3 per cent of the public health workers held positions in voluntary health agencies, although more had had previous experience in voluntary health agencies. Almost one-half of the public health respondents were physicians.

Over one-third of the educators were college or university professors, and close to one-third were provincial consultants or directors.

Thirty-six per cent of the respondents reported a total of 47 research activities. Seventy-five per cent of the educators and 58 per cent of the public health workers reported no research involvement.

Thirty-six per cent reported a total of 58 publications. Seventy-one per cent of the educators and 64 per cent of the public health workers reported no publications.

Seventy per cent of the respondents reported a total of 123 instances of committee work. Only 27 per cent of the educators and 32 per cent of the public health workers reported no committee work. More of the respondents were involved in curriculum committees than in any other single type of committee.

Sixty-two per cent of the respondents reported a total of 100 instances of teaching responsibility. Only 35 per cent of the educators and 41 per cent of the public health workers reported no teaching responsibility.

The supplementary tables on the characteristics of the respondents which support the above findings are included in Appendix G.

The Nature of the Data

Ordinal scale data were obtained from the judgments of the respondents on each guiding principle and each criterion according to a scale of applicability: "definitely applicable," "possibly applicable," or "definitely not applicable" for use in the Canadian school health program.

The data were skewed toward the "definitely applicable" category since the guiding principles and criteria were very similar to

those in the authoritative literature. The range of the "definitely applicable" judgments was from 33 per cent to 100 per cent. The percentages of "possibly applicable" judgments ranged up to 46 per cent. The range of the "definitely not applicable" category was up to 52 per cent.

The Reliability of the Data

A respondent who was interviewed on only one section of the instrument, and asked to complete the other sections by questionnaire, included the section on which she had already been interviewed, with 99 per cent of identical responses, although there was a possible time gap of up to two weeks between the interview and the completion of the questionnaire.

A few items which relate closely to other items were introduced into the instrument to provide, in part, a check on the consistency of the responses, as mentioned previously. An example is shown in Table 9.

TABLE 9

AN EXAMPLE OF CONSISTENCY

Criterion	Educators Pct.	Public Health Workers Pct.	Total Pct.
School health services should make provisions to: m) Assist in adapting the school programme to meet the needs of exceptional (handicapped) pupils. (D.2)	88	89	89
The local medical officer of health, or the school health physician, should provide medical consultation to the educational administrator and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils. (D.70)	84	88	86

The consistency was high.

The Validity of the Data

One of the major purposes in interviewing some of the respondents was to determine the clarity of the instrument. Very few of the respondents suggested modifications. Many commented on their judgments or gave illustrations to support their judgments.

These respondents were highly qualified, interested persons, willing to spend considerable time in making their judgments.

They were assured of confidentiality in regard to their responses. Some were very frank in expressing their judgments even

though they sometimes pointed out that they were aware that some of their own colleagues would disagree because such a position might be less popular. This indicated one of the advantages of the survey procedure. It is much easier to give frank judgments in an interview, or by mail, than it is to express some judgments in multilevel, multidisciplinary meetings.

The high response would seem to suggest the interest of the respondents in the potential findings of this study.

There are almost no sources of comparable data recent enough to compare with the data of this study.

As in many of the first studies in a field of investigation, there is no way to verify the validity of the data, but there were no reasons to suggest that the data were not valid.

The Variables

The independent variables[1] are:

1) The profession of the respondents: educators and public health workers.

2) The type of preparation of the respondents: dual preparation

---

[1]An independent variable is the stimulus variable, or the variable whose changes are regarded as not dependent upon changes in another specified variable: the variable which is manipulated or treated in an experiment to see what effect changes in that variable bring about in the variables regarded as dependent upon it. Adapted from English and English, p. 578.

(in which a respondent had basic preparation in either education or public health followed by at least one year of preparation in the other field), preparation in education, preparation in public health.

3) The length of experience of the respondents: under 10 years, 10-19 years, and 20 years and more.

4) The range of involvement of the respondents: Group I includes those respondents who have been involved in three or more of: research, publication, committee work, or teaching; and Group II includes those with involvement in one or two of these activities.

The intervening variables[1] are the guiding principles and the criteria.

The dependent, or response, variables[2] are the judgments of the respondents according to the scale of applicability: "definitely applicable,""possibly applicable," or "definitely not applicable" for use in Canadian school health programs.

---

[1]An intervening variable is any variable that is functionally connected with a preceding and a following variable. Adapted from English and English, p. 578.

[2]A dependent variable is a variable whose changes are treated as being consequent upon other changes in one or more variables called collectively the independent variables. This is the response variable. Adapted from English and English, p. 578.

In this study profession was the major independent variable, and the only independent variable used in determining the endorsement. In determining the relative agreements, profession, type of preparation, length of experience, and range of involvement were the independent variables.

The major independent variable in most of the related studies was profession. In very few studies were type of preparation and length of experience used as independent variables.

The Purposes of the Analysis

The purposes of the analysis were:

1) To determine those guiding principles and criteria judged "definitely applicable" by 75 per cent and more of the educators and the public health workers, that is, those guiding principles and criteria endorsed by both groups of professional respondents as applicable for use in Canadian school health programs.

2) To determine the degree of agreement, through the average differences in percentages, the relative similarity in rankings[1] when the average difference was sufficiently high, and

---

[1]The criteria were placed in rank order according to the percentage of "definitely applicable" judgments on the basis of profession, type of preparation, length of experience, and range of involvement, and the similarity in these rankings was determined.

comparison of the groups of respondents which made higher judgments on the larger proportion[1] of criteria, according to profession, type of preparation, length of experience and range of involvement.

No hypotheses were established for testing in this study. It is hoped that some clues from these data may lead to the development of hypotheses for future testing.

The Treatment of the Data

The data were coded according to a code plan, developed for this study, and punched on IBM cards, 8 cards per respondent. Each respondent was given a code number from 001 to 126. The comments and suggestions for modification of the guiding principles and criteria were recorded with the code number of the respondent.

The IBM cards were sorted and counted on the IBM 101 Sorter. The data were transferred to tables, 4 tables for each item, on the basis of profession, type of preparation, length of experience, and range of involvement, a total of more than 1375 tables, and percentages were determined. Summary tables of the "definitely applicable"

---

[1]Proportion was used rather than percentage to avoid confusion with the percentages of "definitely applicable" judgments, and the percentages in which the average differences were expressed. The ties were not counted in the total N in determining the proportion judged higher.

judgments on all of the guiding principles and criteria are included in Appendix H.

The plan of the analysis was to determine:

1) Evidence of endorsement of the guiding principles and criteria by the respondents (on the basis of at least 75 per cent "definitely applicable" judgments of the respondents according to profession).

2) Evidence of relative agreement, or lack of agreement, in the "definitely applicable" judgments of the respondents according to profession, type of preparation, length of experience, and range of involvement on:

   a) Criteria on some major dimensions of the school health program: school-community coordination of the school health program; the educational nature of the school health program; interdepartmental planning and organization; coordination of the school health program with official public health programs; coordination of the school health program with other community agencies; school health policies and procedures; the pupil focus of the program: health needs, interests, attitudes, and practices of pupils; pupil involvement in the school health program, and attention to individual health differences; coordination with parental responsibility; coordination

with family medical and dental supervision; communications to others, communications with others, communications from others; and appraisal and evaluation.

b) Criteria on the component parts of the school health program: healthful school living, health education, and school health services.

The Measures and Their Interpretation

Endorsement was determined by an arbitrary cut-off point of at least 75 per cent of the educators' and public health workers' "definitely applicable" judgments, to ensure that these guiding principles and criteria were reasonably appropriate for use in the Canadian school health programs. If those judged "possibly applicable" had been included, it would have resulted in the retention of a much larger proportion of the criteria being endorsed, but it was interpreted that "possibly applicable" also meant "possibly not applicable."

Endorsement provides a starting point, a baseline of reasonably acceptable guiding principles and criteria. Those supported by less than 75 per cent of both groups were interpreted as rejected. Those rejected by either or both groups indicate need for further study and possible redefinition if they are related to an essential dimension of the school health program. For example, it is important that this rejected criterion should be redefined:

> The school health programme should be organized and administered jointly by the provincial and local departments of education and departments of public health. (A.4)

Endorsement does not necessarily show the relative agreement, or lack of agreement, between the judgments of the groups of respondents. On a specific criterion, there may have been endorsement by one group at the 75 per cent level, and by another group at the 95 per cent level, thus the two respondent groups seems to have judged on different levels. If the average difference was 8 or 9 per cent this was interpreted as being on a moderately different level, if at least 10 per cent it was interpreted as a different level. A criterion might have been ranked first by one group of respondents and tenth by another group of respondents, yet both were endorsed at the 75 per cent level. On some groups of criteria a group of the respondents made higher judgments on more of the criteria than did another group of respondents.

To determine the degree and extent of agreement on the respondents "definitely applicable" judgments three types of measures were used:

1) The difference in percentage between the "definitely applicable" judgments of the groups of the respondents on each guiding principle and on each criterion, and the average difference for a group of related criteria. An average of the average differences was calculated for related groups of criteria.

2) If the average difference for a group of criteria was at least 8 per cent Kendall's tau was used to show the similarity or lack of similarity in the rankings.

3) The proportion of criteria judged higher by one group of respondents than by another group of respondents was calculated to show which groups of the respondents made more liberal (higher) judgments and which made more conservative (lower) judgments on the groups of related criteria.

The value of Kendall's tau varies from -1.0 to +1.0. A value of + 1.0 indicates perfect positive agreement in the rankings, while a value of - 1.0 indicates perfect disagreement. The tau_b formula was used with its adjustment for ties when there were ties in the rankings. Kendall's tau was used in preference to Spearman's measure for rank-order correlation because tau is a more satisfactory measure when the number of ties is quite large. Spearman's measure gives relatively more weight to extreme differences in ranks since all of the differences are squared whereas tau gives equal weight to all pairs of the scores.[1]

The differences in percentages on a specific criterion ranged up to 34 per cent, the average difference on groups of criteria ranged

---

[1] Maurice G. Kendall, Rank Correlation Methods (2nd ed.; London: Charles Griffin and Co. Ltd., 1955), pp. 1-48.

from about 2 per cent to nearly 20 per cent. The average of the average differences ranged from 4 per cent to 12.5 per cent.

If the average difference was 5 per cent or less this was interpreted as a relatively low difference, thus the agreement between the respondent groups seemed to be relatively high.

If the average difference was from 6 to 9 per cent this was interpreted as a relatively moderate difference, thus the agreement between respondent groups seemed to be relatively moderate. In the upper half of this range, that is, where there was an average difference of 8 or 9 per cent, the value of Kendall's tau_a or tau_b (when there were ties in the rankings) was calculated to show whether there was similarity or difference in the rankings. If the average difference was below 8 per cent there was doubt that the similarity or agreement in the rankings was meaningful since as the difference became smaller, the judgments of a very few persons would affect the rankings, in other words, the rankings were not very stable.

If the average difference on a group of criteria was at least 10 per cent this was considered to be a relatively high average difference, and the value of tau_a or tau_b was calculated to show the similarity, or lack of similarity, in the rankings.

A low tau indicated little similarity in ranking, a moderate tau indicated relatively moderate similarity, and a high tau indicated relatively high similarity in ranking.

If the average difference was high and the similarity in the rankings was high there was high agreement with rankings on different levels. If the average difference was high and the similarity in the rankings was moderate there was relatively moderate agreement with the rankings on different levels. If the average difference was high and there was little similarity in the rankings there was relatively low agreement between the respondents.

The interpretation of the average differences and the values of tau is summarized in Chart 1.

CHART 1

THE INTERPRETATION OF THE AVERAGE DIFFERENCE AND THE VALUE OF TAU

Av. Diff. \ Tau	Less than .33	.34 - .66	.67 - 1.00
0 - 5 pct.	high agreement.		.Tau not meaningful
6 - 7 pct.	moderate agreement.		.Tau not meaningful
8 - 9 pct.	low agreement, ranking on moderately different levels	moderate agreement, ranking on moderately different levels	high agreement, ranking on moderately different levels
10 pct. and more	low agreement, ranking on different levels	moderate agreement, ranking on different levels	high agreement, ranking on different levels

When the average differences were high there seemed to be a direction of difference between the two groups that is, one respondent group made higher judgments than another respondent group on a majority of the criteria within a group. For example, the public health workers "definitely applicable" judgments might be higher than those of the educators on more than one-half of the criteria within a group. This was expressed in proportions. Higher judgments were interpreted as more liberal and lower judgments were interpreted as more conservative.

The two major types of treatment of the data, the endorsement by at least 75 per cent of both of the professional groups, and the determination of the measures of the relative agreements between the "definitely applicable" judgments of the respondents on groups of selected criteria, introduced separate frames of reference. The endorsement frame included each guiding principle and criterion only once, thus it followed closely the order of presentation of the criteria in the instrument. The agreement frame, in order to provide a more comprehensive picture of the relative agreements between the respondents on a group of related criteria, involved bringing together related criteria from various parts of the instrument. Had the agreement frame of reference not been used a more superficial picture of the relative agreements would have resulted. Had the endorsement been shown only in relation to this frame of reference

the reader might have been led to assume that there was higher endorsement than really existed since some criteria had implications for two or more groups of criteria. The organization in the agreement frame of reference follows the implications of the nature of the guiding principle or criterion. This is particularly noticeable in Chapter V where criteria from all parts of the instrument are grouped together along some of the major dimensions of the nature and organization of the school health program. It is less noticeable in most of the groupings in the other chapters.

Since the data were obtained from most of a population it is not appropriate to interpret them in terms of statistical significance. For this study, it seemed that more might be gained from using the judgments of as many as possible of this population, rather than using a smaller random sample of it.

The Presentation of the Data

The endorsement of, and the relative agreements on, the guiding principles and selected groups of criteria for some of the major dimensions of the nature and organization of the school health program are presented in Chapter V, those for healthful school living in Chapter VI, those for health education in Chapter VII, and those for health services in Chapter VIII.

In each of these chapters the endorsement is presented first, followed by the relative agreements. The comments of the respondents

are included with the presentation of the endorsement since they tend to have been used by the respondents to justify their judgments.

Because of the vast amount of data, charts and summary tables are presented in the text of the subsequent chapters. The percentages of the "definitely applicable" judgments on all of the guiding principles and criteria are presented in tables in Appendix H, as mentioned earlier. The groups of criteria used as the basis for the determination of the relative agreements are included in Appendix I. The use of these enables the reader to replicate any of the calculations.

In the work tables the criteria were placed in rank order according to the total percentage of the "definitely applicable" judgments and according to percentages of the professional groups, the preparation groups, the experience groups, and the involvement groups. This is illustrated in the presentation of the guiding principles in the next chapter. The other work tables are available from the writer.

Criteria judged at least 10 per cent higher by the dual preparation group, by the under-10-year experience group, and by Group I are shown in Appendix J. In these tables the location of each criterion in the instrument is indicated by the letter (to denote the part of the instrument) and the number in parentheses.

CHAPTER V

THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE GUIDING PRINCIPLES AND SELECTED CRITERIA FOR SOME MAJOR DIMENSIONS OF THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM

While it was not feasible to analyze along all of the potential dimensions implied in the general principles, twenty-one dimensions were worked out, and the following were selected for presentation:

1) School-community coordination of the school health program.

2) The educational nature of the school health program.

3) Interdepartmental planning and organization.

4) Coordination of the school health program with official public health programs.

5) Coordination of the school health program with other community agencies.

6) School health policies and procedures.

7) The pupil focus of the school health program:

   a) Health needs, interests, attitudes, and practices of pupils.

   b) Pupil involvement in the school health program.

   c) Attention to individual health differences.

8) Coordination of the school health program with parental responsibility for the health of their children and youth.

9) Coordination of the school health program with family medical and dental supervision of children and youth.

10) Communications:

a) Communications to others.

b) Communications with others.

c) Communications from others.

11) Appraisal and evaluation of the school health program.

The analysis of the guiding principles is presented first, followed by the endorsement of the criteria on the nature and organization of the school health program from Part A of the instrument, as a background for the analysis of the groups of criteria on these dimensions.

THE GUIDING PRINCIPLES

The frames of reference for endorsement and for agreement between the respondents are the same for the guiding principles.

The percentages and rankings of the "definitely applicable" judgments on the guiding principles are shown in Table 10, as an example of the way in which the data were ranked and treated.

All of the guiding principles were endorsed at the 75 per cent level. The range for the educators was from 75 to 100 per cent, that for the public health workers from 78 to 97 per cent.

TABLE 10

THE MEASURES ON THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE GUIDING PRINCIPLES ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE AND RANGE OF INVOLVEMENT

Guiding Principle	Total		Profession				Preparation						Experience						Involvement			
			Educ.		Health		Dual		Educ.		Health		Under 10 Yrs.		10-19 Yrs.		20 Yrs. & More		Gr. I		Gr. II	
	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.	Pct.	Rk.
	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)	
Principle B.IV	98	1	100	1	97	1	96	2	100	1	98	1	100	3	95	2.5	100	1	95	1	100	1
Principle C.VII	93	2	88	5	96	2	96	2	87	5	95	2	93	6.5	95	2.5	91	3.5	90	2.5	94	2.5
Principle B.V	92	3	94	2	90	4.5	96	2	95	2	88	5	93	6.5	91	4	92	2	88	5	94	2.5
Principle C.VI	91	4.5	90	4	92	3	93	4	90	4	91	3.5	100	3	88	5	91	3.5	88	5	93	4
Principle B.III	91	4.5	92	3	90	4.5	89	5	92	3	91	3.5	100	3	98	1	84	5	90	2.5	92	5
Principle B.II	80	6	83	6	78	8	79	6	82	6	79	8	80	8	77	6.5	81	6	88	5	76	8
Principle A.I	79	7	77	7	81	6.5	75	7	77	7	83	7	100	3	72	8	79	7	85	7	77	7
Principle D.VIII	78	8	75	8	81	6.5	64	8	76	8	86	6	100	3	77	6.5	75	8	80	8	78	6
Average Difference			(2) & (3) = 4				(4) & (5) = 5 (4) & (6) = 6				(5) & (6) = 5		(7) & (8) = 8 (7) & (9) = 9				(8) & (9) = 5		(10)&(11) = 6			
Tau_b													(7) & (8) = .04 (7) & (9) = -.09									
Proportion of Guiding Principles Judged Higher by One Group			.50				(4) & (5) = .62 (educ.) (4) & (6) = .50 (5) & (6) = .50						(7) & (8) = .88 (10 yr.) (7) & (9) = .75 (10 yr.) (8) & (9) = .62 (20 yr.)						(10) & (11) = .62 (Gr.II)			

The average difference between the professional groups was low so there was relatively high agreement.

On the basis of the types of preparation the average differences were low to moderate so there were relatively high to moderate agreements.

The average differences between the experience groups ranged from upper moderate to high values. The similarity in the rankings between the under-10-year and the 10-19-year experience groups was extremely low. There was no similarity in the rankings between the under-10-year and the 20-year-and-more experience groups. Thus there was very low agreement between the under-10-year and the 10-19-year experience groups, and a lack of agreement between the under-10-year and the 20-year-and-more experience groups.

There was moderate agreement between the involvement groups on the basis of a moderate average difference.

THE ENDORSEMENT OF CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM

Eighteen criteria were brought together in Part A of the instrument to act as key criteria for some important dimensions of the nature and organization of the school health program.

These were correlated with the guiding principle, "The school health programme should provide for the understanding, protection,

promotion, and restoration of the physical, emotional and social health of students and staff members through healthful school living, health education, and school health services." Nearly one-third of the respondents, almost one-half of whom were educators, commented. There was criticism as well as commendation for the inclusion of the rehabilitative concept. Most of these respondents wanted to delete the inclusion of the staff members.

The endorsement of these criteria is summarized in Chart 2.

Less than one-half of these criteria were endorsed by both the educators and the public health workers.

Nearly one-fifth of the respondents, three-fifths of whom were public health workers, commented on the criterion for the school health program strengthening and supplementing parental responsibility. Most of the comments were supportive. A few suggested that "stimulate" might replace "strengthen." Some referred to the concept of parental deprivation, as one educator said, "The problem is to determine the needs, in some areas you may have to do much more because the parents are not accepting responsibility." Another educator said:

> School and home action for health should be mutually reinforcing and demands parent-teacher participation in the development of the school health program.

CHART 2

THE ENDORSEMENT OF THE CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
The school health programme should strengthen and supplement parental responsibility, and family medical and dental supervision. (A.1)			
The school health programme should be coordinated with the appropriate public health programmes, . . .	. . . and with the entire educational programme. (A.2)		
The school health programme should be based on the expressed, observed, and anticipated health needs, . . .			. . . interests, attitudes, and practices of students. (A.3)
			The school health programme should be organized and administered jointly by the provincial and local departments of education and departments of health. (A.4)
		Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation at the provincial and local levels. (A.5)	
			School health policies and procedures should be determined jointly by the departments of education and departments of health,
should provide direction for the programme, . . .		. . . should define the responsibilities of personnel,	
and should be interpreted to teachers and other school personnel, to related professional groups, and to parents. (A.6)			
			There should be a planned programme of evaluation of the entire school health programme on a continuous basis (A.7)

Almost one-sixth of the respondents, three-fifths of whom were public health workers, commented on the criterion for strengthening and supplementing family medical and dental supervision. Two public health workers suggested that "complement" might be preferable to "supplement." An educator said:

> At present there seems to be a lack of adequate liaison between the school and medical/dental services. The end envisaged here can (and should) be attained by improved communications between the school and the community health services.

Only one respondent queried the potential effects of medicare.

The criterion for coordination with the appropriate public health programs was commented on by nearly one-fifth of the respondents, more than three-quarters of whom were public health workers. The majority of these respondents referred to the importance of the continuity of health care from infancy through adulthood.

Less than one-quarter of the respondents, nearly three-quarters of whom were public health workers, commented on the criterion for coordination of the school health program with the entire educational program. Most of these respondents gave examples of secondary schools, technical and vocational schools where there were no school health programs. 'Some expressed concern about the lack of a school health program in terminal educational programs.

Nearly one-seventh of the respondents, over one-half of whom were public health workers, commented on the criterion for the school

health program being based on the health needs of the pupils. All of these respondents supported this, although a few suggested that the needs should be studied. Over one-quarter of the respondents, more than two-thirds of whom were public health workers, commented on the criterion for the health interests of the students. Many of these spoke of arousing the "right" interests. Only one respondent referred to the differences between boys and girls at the different ages and stages of development. Nearly one-third of the respondents, almost two-third of whom were public health workers, commented on the criterion for the health attitudes of students. Many referred to the "implanting" of proper attitudes. Nearly one-quarter of the respondents, over one-half of whom were public health workers, commented on the criterion for the health practices of the students. On all of these criteria there seemed to be real eagerness for change to what is "right," with less awareness of the importance of the assessment of current interests, attitudes, and practices as a basis for the planning of change.

Over one-third of the respondents, almost two-thirds of whom were public health workers, commented on the criterion for joint organization and administration of the school health program. Several urged the appointment of a coordinator to facilitate this. Some were concerned about the difficulties, especially where the units of administration were not comparable, where a provincial department of

health and a local board of education were involved. Almost one-third of the respondents who commented expressed the feeling that, at present, the major responsibility for administration had to be accepted by the department of education assisted by the department of health. There was some evidence that there was more resistance to the idea of interdepartmental administration than to the idea of interdepartmental organization. An educator said, "I'm not keen on this, divided and overlapping authority creates difficulties." Many said that better coordination was imperative.

The largest difference between the educators and the public health workers was on the criterion for provincial interdepartmental committees. Over one-quarter of the respondents, almost one-half of whom were educators, commented. Some of these respondents were very enthusiastic but few indicated that they knew of such a committee. It was suggested that these should be policy committees. One public health worker said:

> Understanding and cooperation of all concerned groups is very important at all levels. I feel . . . that this is lacking in many areas of public health work. Any effort made to improve the situation will be well spent and well worthwhile.

Over one-third of the respondents, more than one-half of whom were public health workers, commented on the criterion for the interdepartmental committees at the local level. One public health worker said, "It would encourage interchange of views on some of the problems

which cause conflicts, for example, the separation of emotional and mental health as distinct from physical health." A few expressed fear that an additional committee would involve already over-burdened staff members. Several suggested the addition of committees at the regional level.

Nearly one-third of the respondents, two-thirds of whom were public health workers, commented on the criterion for school health policies being determined jointly by the departments of education and departments of health. Several of these respondents suggested the inclusion of other professional consultants. Few of the respondents commented on the other criteria for school health policies and procedures.

Over one-third of the respondents, almost three-fifths of whom were public health workers, commented on the criterion for continuous evaluation of the school health program. Almost all of these respondents supported the idea that this should be done but queried how it could be done, and who should do it.

In summary, the proportion of these criteria endorsed by both professional groups was .44, while the proportion endorsed by the educators was .50 and the proportion endorsed by the public health workers was .61.

RELATIVE AGREEMENTS BETWEEN THE RESPONDENTS ON GROUPS OF CRITERIA FOR SOME OF THE MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM

The relative agreements according to profession, type of preparation, length of experience, and range of involvement, were calculated to try to ascertain whether there were any differences in the "definitely applicable" judgments of the respondents that might be attributable to their preparation, experience, or involvement.

Relative agreement must not be confused with support for the nature of a group of criteria. The respondents may have agreed in their judgments but may have rejected most of the criteria within a group.

Analysis According to Profession

As shown in Table 1, Chapter IV, 41 per cent of the respondents were educators and 59 per cent were public health workers.

The measures of agreement according to profession are shown in Table 11. Their interpretation in terms of relative agreements is shown in Chart 3.

There were relatively high agreements on just over one-quarter of these groups, moderate agreements on nearly one-half of the groups, and low agreements on just over one-quarter of these groups.

TABLE 11

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO PROFESSION

Group of Criteria	Profession Av. Diff. Pct.	Tau	Relative Agreement	Proportion of Criteria Judged Higher by One Group
School-Community Coordination	8	.18	low (md1)[1]	.75 (health)
Educational Nature of Program	3	*	high	.72 (health)
Interdepartmental Planning and Organization	7	*	mod.[2]	.80 (health)
Coordination with Official Public Health Programs	9	.46	mod. (md1)	.79 (health)
Coordination with Other Community Agencies	7	*	mod.	.67 (health)
Policies and Procedures	7	*	mod.	.57 (health)
Health Needs, Interests, Attitudes, and Practices	5	*	high	.60 (health)
Pupil Involvement	4	*	high	.62 (health)
Attention to Individual Health Differences	9	.20	low (md1)	.79 (educ.)
Coordination with Parental Responsibility	10	.47	mod.(d1)[3]	.92 (health)
Coordination with Family Medical and Dental Supervision	13	.30	low (d1)	1.00 (health)
Communications to Others	11	.50	mod. (d1)	.90 (health)
Communications with Others	13	.21	low (d1)	.91 (health)
Communications from Others	5	*	high	1.00 (health)
Appraisal and Evaluation	7	*	mod.	.50
Average of Average Differences	8			

*This value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

1 Moderately different level.

2 Moderate agreement.

3 Different level.

CHART 3

THE COMPARISON OF THE RELATIVE AGREEMENTS ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO PROFESSION

Level of Agreement \ Relative Agreement	Low	Moderate	High
Similar		Interdepartmental Planning and Organization Coordination with Other Community Agencies Policies and Procedures Appraisal and Evaluation	Educational Nature Health Needs, Interests, Attitudes and Practices Pupil Involvement Communications from Others
Moderately Different	School-Community Coordination Attention to Individual Health Differences	Coordination with Official Public Health Programs	
Different	Coordination with Family Medical and Dental Supervision Communications with Others	Coordination with Parental Responsibility Communications to Others	

The levels of agreement were similar on over one-half, moderately different on one-fifth, and different on over one-quarter of these groups of criteria.

The public health workers made as high or higher judgments on all of these groups of criteria except that for attention to individual health differences.

Analysis According to Type of Preparation

As shown in Table 6, Chapter IV, 22 per cent of the respondents had dual preparation, 31 per cent had preparation in education only, and 47 per cent had preparation in public health only.

The comparison of the measures of agreement on these groups of criteria according to preparation is shown in Table 12.

The averages of the average differences were the same for the dual and education preparation groups, for the dual and health preparation groups, and for the education and health preparation groups, thus there was little apparent difference on the basis of type of preparation. It is possible, however, that there were slight differences that cancelled one another.

TABLE 12

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO TYPE OF PREPARATION

Group of Criteria	Type of Preparation								
	Dual and Education		Proportion Judged Higher by One Group	Dual and Health		Proportion Judged Higher by One Group	Education and Health		Proportion Judged Higher by One Group
	Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau	
School-Community Coordination	10	.24	.75 (educ.)	10	.55	.50	7	*	.75 (health)
Educational Nature of Program	9	.51	.62 (dual)	6	*	.50	4	*	.58 (health)
Interdepartmental Planning and Organization	6	*	.71 (educ.)	9	.90	1.00 (health)	7	*	.83 (health)
Coordination with Official Public Health	8	.51	.62 (educ.)	6	*	.50	10	.38	.54 (health)
Coordination with Other Community Agencies	11	.37	.55 (educ.)	7	*	.55 (dual)	9	.60	.55 (health)
Policies and Procedures	11	.24	.69 (educ.)	7	*	.62 (health)	8	.18	.53 (educ.)
Health Needs, Interests, Attitudes, and Practices	8	.53	.65 (educ.)	8	*	.70 (health)	6	*	.65 (health)
Pupil Involvement	6	*	.89 (educ.)	5	*	.78 (health)	5	*	.67 (educ.)
Attention to Individual Health Differences	16	.07	.73 (educ.)	10	.60	.75 (health)	12	-.02	.80 (educ.)
Coordination with Parental Responsibility	9	.62	.54 (educ.)	11	.56	.83 (health)	11	.46	.84 (health)
Coordination with Family Medical and Dental Supervision	10	-.06	.72 (dual)	12	.12	.82 (health)	16	.00	1.00 (health)
Communications to Others	10	.46	.50	11	.61	.67 (health)	13	.40	.80 (health)
Communications with Others	8	.24	.55 (dual)	12	.54	.91 (health)	15	-.09	.90 (health)
Communications from Others	4	*	.75 (educ.)	6	*	1.00 (health)	4	*	.75 (health)
Appraisal and Evaluation	8	.61	.54 (educ.)	11	.38	.62 (health)	10	.58	.54 (educ.)
Average of Average Differences	9			9			9		

*The value is not meaningful because the average difference is not sufficiently large to make the rankings relatively stable.

On closer examination, if dual preparation makes no difference, the relative agreements on the basis of profession, and those between the education preparation and the health preparation groups should be very similar. The total of those in the education preparation group is somewhat smaller than the total in the professional groups since 22 per cent of the respondents had dual preparation. These measures are compared in Table 13.

There were very similar measures by the professional groups and the health and education preparation groups on the groups of criteria for the educational nature of the program; interdepartmental planning and organization; health needs, interests, attitudes, and practices; pupil involvement; coordination with parental responsibility; communications to others; and communications with others. There were slightly higher average differences and lower similarities in the rankings on the other groups, especially noticeable in the groups of criteria for: coordination with family medical and dental supervision; communications with others; and attention to individual health differences; the groups of criteria on which there were relatively low agreements.

The comparative differences and similarities in agreement between the dual and education preparation groups, and between the dual and health preparation groups should indicate whether the dual preparation group made more similar judgments to the health preparation group or to the education preparation group.

TABLE 13

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO PROFESSION AND TO HEALTH AND EDUCATION PREPARATION

GROUP OF CRITERIA	Profession		Health Preparation and Education Preparation Groups	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
School-Community Coordination	8	.18	7	*
Educational Nature of Program	3	*	4	*
Interdepartmental Planning and Organization	7	*	7	*
Coordination with Official Public Health Programs	9	.46	10	.38
Coordination with Other Community Agencies	7	*	9	.60
Policies and Procedures	7	*	8	.18
Health Needs, Interests, Attitudes and Practices	5	*	6	*
Pupil Involvement	4	*	5	*
Attention to Individual Health Differences	9	.20	12	-.02
Coordination with Parental Responsibility	10	.47	11	.46
Coordination with Family Medical and Dental Supervision	13	.30	16	.00
Communications to Others	11	.50	13	.40
Communications with Others	13	.21	15	-.09
Communications from Others	5	*	4	*
Appraisal and Evaluation	7	*	10	.58
Average of Average Differences	8		9	

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

Although there were some marked similarities between the dual and education preparation groups, and the dual and health preparation groups, on most of the groups of criteria, the slightly higher values for agreement indicate that there was slightly more agreement between the dual and health preparation groups on all of the groups of criteria except those for: appraisal and evaluation; and communications from others (in which there was a very slight differenct).

The education preparation group made as high or higher judgments than the dual preparation group on the groups of criteria for: school-community coordination; interdepartmental planning and organization; coordination with official public health programs; coordination with other community agencies; policies and procedures; health needs, interests, attitudes, and practices; pupil involvement; attention to individual health differences; coordination with parental responsibility; communications to others; communications from others; and appraisal and evaluation.

The dual preparation group made as high or higher judgments than the education preparation group on the groups of criteria for the educational nature of the school health program; coordination with family medical and dental supervision; communications with others; and communications to others. The criteria judged at least 10 per cent higher by the dual preparation group than by the education and health preparation groups are shown in Appendix J.

The health preparation group made as high or higher judgments than the dual preparation group on all of the groups of criteria except that for coordination with other community agencies. The health preparation group made as high or higher judgments than the education preparation group on all of the groups of criteria except those for: attention to individual health differences; pupil involvement; appraisal and evaluation; and policies and procedures.

Analysis According to Length of Experience

Twelve per cent of the respondents had under 10 years of experience, and 52 per cent had at least 20 years of experience, as shown in Table 7, Chapter IV.

The comparison of the measures of agreement according to length of experience is shown in Table 14.

If there were no appreciable differences between the agreements of the under-10-year and the 10-19-year experience groups, and those of the 10-19-year and the 20-year-and-more experience groups, it could be assumed that length of experience made no difference.

It is very evident that there were higher agreements between the 10-19-year and the 20-year-and-more experience groups than between any of the other experience groups. There were no relatively high agreements between the under-10-year and the 10-19-year experience groups, or between the under-10-year and the 20-year-and-more experience groups.

TABLE 14

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO LENGTH OF EXPERIENCE

Group of Criteria	Length of Experience								
	Under 10 Yrs. and 10-19 Yrs.		Proportion Judged Higher by One Group	Under 10 Yrs. and 20 Yrs. and More		Proportion Judged Higher by One Group	10-19 Yrs. and 20 Yrs. and More		Proportion Judged Higher by One Group
	Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau	
School-Community Coordination	10	.18	.75(10-19 yr)[1]	13	.18	.75(20 yr.)[2]	3	*	.67(20 yr.)
Educational Nature of Program	9	.41	.84 (10 yr)[3]	6	*	.64(10 yr.)	6	*	1.00(20 yr.)
Interdepartmental Planning and Organization	11	.59	.86 (10 yr.)	8	.49	.71(10 yr.)	8	.81	.71(20 yr.)
Coordination with Official Public Health Programs	10	.61	.83 (10 yr.)	7	*	.57(20 yr.)	7	*	.92(20 yr.)
Coordination with Other Community Agencies	11	.50	.80 (10 yr.)	10	.49	.73(10 yr.)	6	*	.55(10-19 yr.)
Policies and Procedures	7	*	.56(10-19 yr.)	6	*	.69(20 yr.)	4	*	.50
Health Needs, Interests, Attitudes and Practices	10	.56	.53 (10 yr.)	9	.54	.52(10 yr.)	5	*	.58(20 yr.)
Pupil Involvement	7	*	.78 (10 yr.)	6	*	.64(10 yr.)	6	*	.87(20 yr.)
Attention to Individual Health Differences	8	.39	.87 (10 yr.)	8	.35	.69(10 yr.)	5	*	.87(20 yr.)
Coordination with Parental Responsibility	7	*	.64 (10 yr.)	6	*	.64(10 yr.)	4	*	.75(20 yr.)
Coordination with Family Medical and Dental Supervision	9	.28	.72 (10 yr.)	12	-.24	.63(10 yr.)	7	*	.60(20 yr.)
Communications to Others	8	.66	.70(10-19 yr.)	7	*	.70(20 yr.)	7	*	.60(10-19 yr.)
Communications with Others	11	.55	.82 (10 yr.)	11	.47	.75(10 yr.)	6	*	.67(20 yr.)
Communications from Others	10	.50	1.00 (10 yr.)	6	*	1.00(10 yr.)	4	*	1.00(20 yr.)
Appraisal and Evaluation	12	.53	.67 (10 yr.)	11	.66	.62(10 yr.)	3	*	.62(20 yr.)
Average of Average Differences	9			8			5		

*The value is not meaningful because the average difference is not sufficiently large to make the rankings stable

[1]10-19 years

[2]20 years and more

[3]Under 10 years.

Between the under-10-year and the 20-year-and-more experience groups there were as high, or slightly higher, relative agreements than between the under-10-year and the 10-19-year experience groups on all of the groups of criteria except that for coordination with family medical and dental supervision.

The criteria judged at least 10 per cent higher by the under-10-year experience group are shown in Appendix J.

The average of the average differences was much lower for the 10-19-year and the 20-year-and-more experience groups than for the under-10-year and the 10-19-year experience groups. That for the under-10-year and the 20-year-and-more experience groups was very slightly lower than that for the under-10-year and the 10-19-year experience groups, supporting the suggestion that there may be slightly closer similarity between the under-10-year and the 20-year-and-more experience groups on most of the groups of criteria.

The under-10-year experience group made higher judgments than the 10-19-year experience group on all of the groups of criteria except those for: school-community coordination; policies and procedures; and communications to others. The under-10-year experience group made higher judgments than the 20-year-and-more experience groups on all of the groups of criteria except those for: school-community coordination; coordination with official public health programs; policies and procedures; and communications to others.

The 20-year-and-more experience group made as high or higher judgments than the 10-19-year experience group on all of the groups of criteria except that for coordination with other community agencies, and that for communications to others.

Analysis According to Range of Involvement

As shown in Table 8, Chapter IV, one-third of the respondents had had involvements in three or more of the selected leadership activities: research, publication, committee work, or teaching, and thus were eligible for inclusion in Group I.

The comparison of the measures of agreement according to range of involvement is shown in Table 15.

Between the involvement groups there were relatively moderate to high agreements on all of the groups of criteria. There were almost as many high agreements between the involvement groups as between the 10-19-year and the 20-year-and-more experience groups.

The average of the average differences for the involvement groups was in the lower-moderate values, just slightly higher than that between the 10-19-year and the 20-year-and-more experience groups.

TABLE 15

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM ACCORDING TO RANGE OF INVOLVEMENT

Group of Criteria	Involvement Group I and Group II Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
School-Community Coordination	6	*	.75 (I)
Educational Nature of the Program	5	*	.67 (II)
Interdepartmental Planning and Organization	7	*	.71 (II)
Coordination with Official Public Health Programs	8	.58	.50
Coordination with Other Community Agencies	6	*	.78 (I)
Policies and Procedures	7	*	.62 (II)
Health Needs, Interests, Attitudes and Practices	6	*	.74 (I)
Pupil Involvement	4	*	.53 (II)
Attention to Individual Health Differences	5	*	.57 (II)
Coordination with Parental Responsibility	6	*	.60 (II)
Coordination with Family Medical and Dental Supervision	6	*	.60 (I)
Communications to Others	7	*	.60 (II)
Communications with Others	5	*	.55 (I)
Communications from Others	3	*	1.00 (II)
Appraisal and Evaluation	5	*	.73 (I)
Average of Average Differences	6		

*The value is not meaningful because the average difference is not sufficiently large to make the rankings relatively stable.

Group I made as high or higher judgments than Group II on the groups of criteria for: school-community coordination; coordination with other community agencies; health needs, interests, attitudes, and practices of pupils; coordination with family medical and dental supervision; communications with others; appraisal and evaluation; and coordination with official public health programs.

The criteria judged at least 10 per cent higher by Group I are shown in Appendix J.

SUMMARY AND CONCLUSIONS

All of the guiding principles and a proportion of .44 of the criteria for the nature and organization of the school health program (from Part A of the instrument) were endorsed by both professional groups. The educators endorsed .50 and the public health workers endorsed .61 of these criteria.

The proportion of criteria endorsed within each of the groups of criteria, while it gives an erroneous picture of the true endorsement (since criteria from all parts of the instrument were included), does indicate the support of the respondents for the criteria within the groups. These are summarized in Table 16.

TABLE 16

THE PROPORTION OF CRITERIA ENDORSED BY BOTH PROFESSIONAL GROUPS IN THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE SCHOOL HEALTH PROGRAM

Group of Criteria	Number of Criteria	Proportion Endorsed by Both Groups
Communications from Others	4	1.00
Pupil Involvement	16	.81
School-Community Coordination	4	.75
Coordination with Parental Responsibility	13	.69
Health Needs, Interests, Attitudes and Practices of Pupils	21	.67
Communications to Others	10	.60
Policies and Procedures	16	.56
Coordination with Family Medical and Dental Supervision	11	.56
Educational Nature of the Program	13	.54
Appraisal and Evaluation	13	.46
Attention to Individual Health Differences	16	.38
Coordination with Official Public Health Programs	14	.36
Coordination with Community Agencies	11	.36
Interdepartmental Planning and Organization	7	.28
Communications with Others	12	.17

There was endorsement by both professional groups of more than two-thirds of the criteria in only one-third of the groups of criteria. More criteria seem to have been endorsed in most of the groups that are focused on the pupil than in the groups on organization, administration, and the relationships of the program with other agencies and programs.

The measures of relative agreement according to profession, type of preparation, length of experience and range of involvement are summarized in Appendix K.

The averages of the average differences showed that the closest agreements were between the 10-19-year and the 20-year-and-more experience groups, followed closely by the involvement groups. The averages of the average differences were the same for the professional groups and for the under-10-year and the 20-year-and-more experience groups. The averages of the average differences for the preparation groups and for the under-10-year and the 10-19-year experience groups were the same.

On the following groups of criteria there were no appreciable differences in the relatively moderate agreements of the groups of respondents compared, except in differences in levels of agreement:

1) Coordination with official public health programs.

2) Coordination with other community agencies.

3) Communications to others.

There were relatively high agreements on the following groups of criteria between the respondent groups indicated in parentheses:

1) Communications from others (professional groups, dual and education preparation groups, education and health preparation groups, 10-19-year and 20-year-and-more experience groups, and involvement groups).
2) Pupil involvement (professional groups, dual and health preparation groups, education and health preparation groups, and involvement groups).
3) Health needs, interests, attitudes, and practices (professional groups, dual and health preparation groups, 10-19-year and 20-year-and-more experience groups).
4) Educational nature of the school health programs (professional groups, education and health preparation groups, and involvement groups).
5) Interdepartmental planning and organization (dual and health preparation groups, and 10-19-year and 20-year-and-more experience groups).
6) Attention to individual health differences (10-19-year and 20-year-and-more experience groups, and involvement groups).
7) Appraisal and evaluation (10-19-year and 20-year-and-more experience groups, and involvement groups).

8) School-community coordination (10-19-year and 20-year-and-more experience groups).

9) Policies and procedures (10-19-year and 20-year-and-more experience groups).

10) Coordination with parental responsibilities (10-19-year and 20-year-and-more experience groups).

There were relatively low agreements on the following groups of criteria between the respondent groups indicated in parentheses:

1) Coordination with family medical and dental supervision (professional groups, dual and education preparation groups, dual and health preparation groups, education and health preparation groups, under 10-year and 10-19-year experience groups, and under-10-year and 20-year-and-more experience groups).

2) School-community coordination (professional groups, dual and education preparation groups, under-10-year and 10-19-year experience groups, and under-10-year and 20-year-and-more experience groups).

3) Attention to individual health differences (professional groups, dual and education preparation groups, and education and health preparation groups).

4) Communications with others (professional groups, dual and education preparation groups, and education and health preparation groups).

5) School health policies and procedures (dual and education preparation groups, and education and health preparation groups).

The proportions of criteria on which one respondent group made higher judgments than another respondent group showed that:

1) The professional health workers made as high or higher judgments than the educators on all of the groups of criteria except that for attention to individual health differences.

2) The dual preparation groups made as high or higher judgments than the education preparation group on the groups of criteria for: coordination with family medical and dental supervision; the educational nature of the school health program; communications with others; and communications to others. The dual preparation group made as high or higher judgments than the health preparation group on the groups of criteria for: coordination with other community agencies; school-community coordination; coordination with official public health programs; and the educational nature of the school health program.

3) The under-10-year experience group made higher judgments than the 10-19-year experience group, or the 20-year-and-more experience group on all of the groups of criteria except those for: school-community coordination; policies and procedures; and coordination with family medical and dental

supervision. The 20-year-and-more experience group judged slightly higher than the under-10-year experience group on the groups of criteria for: school-community coordination; coordination with official public health programs; policies and procedures; and coordination with family medical and dental supervision. The 20-year-and-more experience group judged as high or higher than the 10-19-year experience group on all of the groups of criteria except that for coordination with other community agencies, and that for communications to others.

4) Group I made as high or higher judgments than Group II on the groups of criteria for: school-community coordination; coordination with other community agencies; health needs, interests, attitudes, and practices of pupils; coordination with family medical and dental supervision; communications with others; appraisal and evaluation; and coordination with official public health programs.

Conclusions

Both professional groups endorsed all of the guiding principles and nearly one-half of the criteria from Part A of the instrument.

While there were some marked similarities in the relative agreements of the respondents on most of the groups of criteria for some major dimensions of the nature and organization of the school

health program there were some differences which suggest that it is worthwhile watching for further evidence that:

1) The nature of the criteria were influential in the endorsement and in the relative agreements of the judgments of the respondents.

2) In general, the public health workers made more liberal judgments than the educators.

3) In general, the dual preparation group made more conservative judgments than either the education preparation group or the health preparation group.

4) In general, the dual preparation group and the health preparation group made slightly more similar judgments than the dual and education preparation groups.

5) In general, the under-10-year experience group made more liberal judgments than either the 10-19-year or the 20-year-and-more experience groups.

6) In general, the 10-19-year experience group made slightly more conservative judgments than the 20-year-and-more experience groups.

7) In general, there were lower average differences between the 10-19-year and the 20-year-and-more experience groups, and between the involvement groups, than between the other groups of respondents.

It should not be assumed that more conservative judgments are less valuable, it could be that on some types of criteria such judgments might be more discriminating.

The relatively high agreements on some groups of criteria, especially those for: communications from others; pupil involvement; health needs, interests, attitudes and practices; and the educational nature of the school health program, provide a foundation for the planning and development of school health programs.

The relatively low agreements, between several pairs of respondent groups, on the groups of criteria for: coordination with family medical and dental supervision; school-community coordination of the school health program; attention to individual health differences; and communications with others, suggest that these may be areas in need of further investigation.

While there is no evidence that these differences were large enough to be meaningful they do attract attention to some phenomena for further study.

CHAPTER VI

THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR HEALTHFUL SCHOOL LIVING

While the term "healthful school living" is not recognized universally as an appropriate designation for the component of the school health program that includes the health of school personnel, the emotional and social environment of the school (the organization of a healthful school day, the establishment of interpersonal relationships favorable to emotional, social and physical health, and the administrative policies conducive to a climate for learning and development), the provisions of a safe and healthful environment (the physical environment, control measures and environmental practices, and safety and accident prevention), and school lunch facilities and services, it is used in this study because it was adopted in Canada shortly after its introduction by the Joint Committee of the National Education Association and the American Medical Association. Its introduction was intended to stress the importance of the behavioral implications of the environment, especially of the non-physical environment.

The criteria for healthful school living were organized into groups according to their nature: the health of school personnel, the

emotional and social environment, the physical environment (subgroups: control measures, and environmental practices), safety and accident prevention within the buildings and grounds, safety and accident prevention on the way to and from school, and school lunch facilities and services.

The endorsement frame and the agreement frame are the same in all of the groups of criteria for healthful school living except that for the health of school personnel in which several criteria from Part D of the instrument were brought together with those from Part B.

THE ENDORSEMENT OF CRITERIA FOR HEALTHFUL SCHOOL LIVING

The Health of School Personnel

Nearly one-quarter of the respondents, three-fifths of whom were public health workers, commented on the guiding principle, "The selection of healthy school personnel and the subsequent assessment, protection and promotion of their health should be fundamental to the provision of healthful school living." More than two-thirds of these respondents questioned what was meant by "healthy" and said that persons with some health handicaps should not be barred from teaching. One-quarter of these respondents stressed the importance of the mental health of the teacher. An educator said:

> Teaching makes heavy demands upon the teacher's physical and emotional resources. A child can suffer serious damage (intellectual and emotional) at the hands of emotionally unstable teachers.

Some respondents referred to the importance of the example set by the teacher, as one said, "In general, school personnel are the leaders in their particular class and should be the leaders in maintaining good health as well as providing good education because many children do and follow what their teachers do and say." Some respondents questioned who should accept the responsibility for the health of school personnel. One public health worker said that the medical officer of health is not the only source of sound guidance on occupational health, but the important thing is that it must be obtained.

The endorsement of the criteria for the health of school personnel is shown in Chart 4.

Only one-third of these criteria were endorsed by both the educators and the public health workers. These refer to the use of sick leave provisions. Those with implications for the prevention, early detection, and treatment of disease were rejected by both groups with the exception of that for immunizations which was endorsed by the educators but not by the public health workers.

CHART 4

THE ENDORSEMENT OF THE CRITERIA FOR THE HEALTH OF SCHOOL PERSONNEL ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Not Endorsed by Either Group
		The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide pre-employment medical examinations, periodic medical examinations, arrangements for all school personnel to participate in screening tests,
	and receive appropriate immunizations offered in the school health services. (B.1)	
Sick leave provisions should be liberal enough to encourage school personnel to remain home when ill. (B.2)		
An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill. (B.3)		

About one-fifth of the respondents, most of whom were public health workers, commented on this criterion for immunization. Over one-third said that immunizations should be voluntary, a few said that they should be compulsory. It was reported that in one area all appropriate immunizations, even those for overseas travel, were being provided. Some public health workers pointed out that this could be incorporated into the school immunization program. A few public health workers said that some medical officers of health have made a policy that all adults, including teachers, should go to the family physician for immunization. One public health worker pointed out that teachers should be allowed to refuse immunization on religious grounds but these teachers should not be allowed to teach health and physical education.

Both educators and public health workers rejected the criteria for consultation in the development, implementation, and/or assessment of a plan to provide pre-employment and periodic medical examinations.

Nearly one-third of the respondents, more than one-half of whom were public health workers, commented on the criterion for plans for pre-employment medical examinations. About one-sixth of these respondents advocated the use of the family physician. Some said that such examinations should be compulsory. Others said that they should be done by a physician appointed by the local board of

education. A public health worker suggested that the examiners should be selected, or the medical society should select them, rather than permitting the use of the family physician. In one large city, it was reported that all applicants, including teachers, are examined by the school health physician (an employee of the local board of education). In another large city all of the applicants for teaching positions are examined by the school health physician in the local department of health. In other cities a private physician was given a retainer and fees for services. A public health worker said, "Failing an occupational health service, I think that the medical examinations should be done by a physician attached to the health department in consultation with a private physician on occasion." A number of the respondents made suggestions about the scope of the examination: from only a compulsory chest x-ray to an examination including a psychiatric assessment. Over one-sixth of those who commented supported the idea that the medical officer of health should act as an adviser to the local board of education.

More than one-quarter, over two-thirds of whom were public health workers, commented on the criterion for periodic medical examinations. In one large city, staff members who have shown poor health records are required to have a medical examination either by a private physician or by a physician in the health department. In another major city it was reported that the teachers have tuberculosis

check-ups every two years, chars and caretakers are examined and x-rayed every two years, bus drivers are examined every year, and all personnel may be referred for medical examinations by the school health physician (an employee of the local board of education). There was disagreement as to whether periodic medical examination should be compulsory or voluntary. A range of frequencies was suggested: every six months for certain persons; every year; every two years; and every three to five years.

Nearly one-fifth of the respondents commented on the criterion for arrangements for screening tests. Some felt that screening tests for tuberculosis should be compulsory. Others said that all screening tests should be voluntary. Several respondents pointed out that screening tests should not replace medical examinations.

Over one-quarter of the respondents, more than one-half of whom were educators, commented on the criterion for sick leave provisions for school personnel. The range of sick leave reported was: 20 days per year, 60 days per year, to almost unlimited sick leave dependent upon length of service. A number of the educators spoke about the abuse of sick leave and felt that there should be more control. One respondent suggested that such benefits should never be convertible to cash benefits. Several educators said that even when generous provisions exist some teachers are reluctant to remain home even with communicable diseases. One respondent told the writer of a

teacher who came to school with mumps in the last week before the final examinations because she was convinced that the students needed her help in preparation.

Although both groups endorsed the criterion for the provision of an adequate number of substitute teachers, it was reported that in one province the teacher has to pay for his own substitute. Many of the respondents spoke of the difficulties created by the demand exceeding the supply. It was suggested that "adequate and qualified" should modify substitute, since most of the teachers were aware that many of the substitutes are recruited from other fields.

It was pointed out that whereas most teachers are covered by physicians' services under a prepayment plan that some of the insurance companies have refused to pay for cancer treatment and for psychiatric treatment.

The Emotional and Social Environment of the School

Less than one-sixth of the respondents, more than one-third of whom were educators, commented on the guiding principle, "The entire school health programme should promote an environment favourable to the emotional and social health of pupils and staff." Most of these respondents queried the meaning of "social health." A few pointed out that the principal of the school has the key position in implementing this guiding principle. The educators upheld the mental health

implications.

The endorsement of the criteria for the emotional and social environment is shown in Chart 5.

Less than one-half of these criteria were endorsed by both groups. The educators endorsed all of these criteria except that for release for selected medical and dental appointments, and that for less emphasis on perfect or near-perfect attendance.

Over one-third of the respondents, more than one-half of whom were educators, commented on the criterion for release of students for selected medical and dental appointments. In one city the doctors had been asked to give late afternoon appointments to students. One urban department of health had a routine form to be signed by the dentist and returned to the school. It was suggested that control was needed since this practice was open to abuse by parents and children.

One-quarter of the respondents, more than one-half of whom were public health workers, commented on the criterion for emphasis on perfect or near-perfect attendance. Pressure for perfect attendance seemed to be related to whether the provincial grants were based on daily attendance, the classroom day, or the number of classrooms. Some educators said that a short stay at home was better than a long, inattentive period at school. It was noted that some of the younger pupils try to remain at school even when quite ill. Others indicated that regular attendance could be very important for slow learners, some emotionally disturbed children, and those from deprived homes.

CHART 5

THE ENDORSEMENT OF THE CRITERIA FOR THE EMOTIONAL AND SOCIAL ENVIRONMENT ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
The school should foster opportunities for the development of good interpersonal relationships among students, among staff members, between staff members and students, and between staff members and parents. (B.4)			
	Teachers should plan their teaching to permit mastery of subject matter by each pupil at his own rate, and to provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear. (B.5)		
The teacher should understand home and community influences in order to work effectively with pupils with specific health problems.(B.6)			
	The pupil-teacher ratio should be small enough to permit individual attention to all pupils, and large enough for group activities.(B.7)		
	Policies with regard to such matters as grade placement, grouping within the classroom, homework assignments, and reporting of pupil's progress, should be adapted to the individual needs and achievements of the pupils. (B.8)		
Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped. (B.9)			
			Perfect or near-perfect attendance should not be over-emphasized since this tends to keep the sick child in school. (B.10)
		Pupils should be released from class on the request of the parent to keep selected medical and dental appointments. (B.11)	

The Physical Environment

The guiding principle, "The entire school plant, (consisting of site, buildings, and equipment) and services should be conducive to the health and safety of pupils and staff," was commented on by less than one-tenth of the respondents. Most of their comments were in the nature of the addition of specifications such as the size of the lot.

The endorsement of the criteria for the physical environment is shown in Chart 6.

Over four-fifths of these criteria were endorsed by both groups. There were very few comments on most of the criteria endorsed by both groups.

The criterion for the annual inspection of the school buildings by the medical officer of health and/or the public health inspector was endorsed only by the public health workers. Nearly one-third of the respondents, almost two-thirds of whom were public health workers, commented on this criterion. It was pointed out that in at least two provinces this was not considered a responsibility of the health department. A number of the respondents said that it would be done on a more frequent basis if indicated, for example, if there was no minicipal water supply or adequate sewage disposal, or if requested. One public health worker advocated that the interval should be left to the discretion of the local public health authority. It was pointed out that the public health department should be consulted in the planning of a new school.

CHART 6

THE ENDORSEMENT OF THE CRITERIA FOR THE PHYSICAL ENVIRONMENT OF THE SCHOOL ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers only	Not Endorsed by Either Group
In the selection of a school site consideration should be given to those factors likely to influence health and safety. (B.12)		
Construction and maintenance of school buildings should be in accordance with, or superior to, minimum required standards with regard to a safe water supply, safe drinking water, heating and ventilation, continual control of heating and ventilation, lighting and its control, lavatory and toilet facilities and supplies, and sanitary garbage and sewage disposal. (B.13)		
	The medical officer of health and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation, and safety on an annual basis. (B.14)	
When improvements are indicated as a result of such inspections the medical officer of health, and/or the public health inspector, should send a written report to the educational administrator and the local board of education,.		.and meet with him to discuss the findings and assist in the planning of corrective action. (B.15)
Seating should be adjusted regularly to meet the individual needs of the pupils. (B.16)		
Pupils should aid in the maintenance of the cleanliness and neatness of classrooms, toilets and lavatories. (B.17)		

Both groups just barely rejected the criterion for the follow-up of inspections through meetings with the educational administrator and the local board of education. Nearly one-quarter of the respondents commented on this criterion, over two-thirds of whom were public health workers. All of the educators who commented were enthusiastic. Most of the public health workers indicated that it depended upon the circumstances, and some said that they might not be able to get an invitation.

Safety and Accident Prevention Within the School Buildings and Grounds

The endorsement of the criteria for safety and accident prevention within the school buildings and grounds is shown in Chart 7.

All of the criteria for safety and accident prevention within the school buildings and grounds were endorsed by both groups.

While most of the relatively few comments were supportive, some concern about overprotection was voiced, as one respondent said:

> It would seem to me that it is possible to oversupervise students. At the same time the student must learn to accept personal responsibility. If we continually protect and "mother" him he will have little opportunity to recognize dangerous situations on his own. Since at some time he will be on his own, we must, after appropriate training, give him an opportunity to plan and implement without us.

CHART 7

THE ENDORSEMENT OF THE CRITERIA FOR SAFETY AND ACCIDENT PREVENTION WITHIN THE SCHOOL BUILDINGS AND GROUNDS ACCORDING TO PROFESSION

Endorsed by Both Groups
The possibility of accidents and fires in schools should be minimized through design of the plant, provision of good equipment, inspection on a regular basis, proper maintenance and a planned programme of fire and accident prevention. (B.18)
Safety measures in physical education programmes, in laboratories and in shops should be given special attention through the provision of safe facilities, the use of the best protective equipment, instruction, careful supervision of the students, and the development of habits of safety. (B.19)
Services of the fire department should be utilized in promoting safety. (B.20)
Pupils should participate in the maintenance of standards of safety and fire prevention. (B.21)

Safety and Accident Prevention on the Way to and from School

The endorsement of the criteria for safety and accident prevention on the way to and from school is shown in Chart 8.

CHART 8

THE ENDORSEMENT OF THE CRITERIA FOR SAFETY AND ACCIDENT PREVENTION ON THE WAY TO AND FROM SCHOOL ACCORDING TO PROFESSION

Endorsed by Both Groups	Not Endorsed by Either Group
Services of the police department should be utilized in promoting safety. (B.20)	
With regard to traffic safety, traffic problems in the school area should be controlled, in so far as possible, school zones should be clearly marked, ...	and trained, adult traffic guards should be on duty at appropriate times in urban areas. (B.22)
All school buses should meet, or exceed, legal minimum standards for the transportation of pupils, be maintained in safe operating conditions, be manned by bus drivers qualified for such driving, and in good physical and mental health. (B.23)	

All but one of the criteria for safety and accident prevention on the way to and from school were endorsed by both groups.

Over one-quarter of the respondents, nearly two-thirds of whom were public health workers, commented on the criterion for the use of trained, adult traffic guards in urban areas. Some of the educators preferred the use of senior students although others expressed concern about the risks involved. Some advocated the use of student patrols supervised by the police. One educator pointed out that adults probably perceive this as "a menial, low-pay, routine job whereas school patrols, if well-trained, take it seriously." Many of the respondents pointed out that although perhaps adults should be used in high traffic density areas, they should not be "doddering old men."

School Lunch Facilities and Services

Over one-tenth of the respondents, more than one-quarter of whom were educators, commented on the guiding principle, "When pupils cannot return home for lunch the provision of school lunch facilities and services should be important parts of healthful school living, should contribute to good nutrition, and should provide important learning experiences." Some educators were unwilling to have school lunch facilities and services introduced when the pupils live close enough to go home. Several suggested that inadequate facilities

inhibited the practice of bringing lunch. One educator suggested that the students could eat in the shelter room (a multi-purpose room used before school and during recess in stormy weather). The cost factor adding to already increasing expenditures for education, the increase in the number of working mothers in some school areas, and the responsibility of the school for the provision of, or the supervision of, lunches were raised.

The endorsement of the criteria for school lunch facilities and services is shown in Chart 9.

Over four-fifths of these criteria were endorsed by both groups. All of the criteria which have implications for the provision of facilities and services were endorsed by both groups.

The public health workers were enthusastic about providing assistance but pointed out that they had no jurisdiction over non-profit establishments, and yet, as one said, "It is even more important that adequate assistance be provided in the school."

Both groups rejected the criteria for the use of the school lunch facilities and services for pupil instruction. Most of the comments on these criteria suggested that this was due to the problems of implementation. Some suggested that this be a part of the home economics course. Others expressed fear that it would interfere further with the teachers' lunch hour. There seemed to be considerable resentment about teacher supervision of the lunch period.

CHART 9

THE ENDORSEMENT OF THE CRITERIA FOR SCHOOL LUNCH FACILITIES AND SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Not Endorsed by Either Group
When students bring lunches there should be adequate storage facilities for the lunches, and a sanitary place to eat lunch. (B.24)	
School lunch rooms should be large enough to permit students to eat there whether they buy lunch or bring it from home. (B.25)	
Lavatories and toilets should be located near lunchrooms to promote handwashing before eating. (B.26)	
If food is prepared, cooked, and served in the school there should be minimum standards with respect to the quality of the food; selection according to Canada's Food Guide; . . .	no carbonated beverages, chocolate milk, gum or candy for sale;
an adequate quantity of food; storage of food, refrigeration; preparation; cooking; dishwashing; and waste disposal. (B.27)	
The public health inspector should provide the same assistance to the lunchroom manager and staff, and the same degree of supervision, as to any other place preparing and serving food. (B.28)	
An adequate number and type of food-handler should be employed, instructed in sanitary foodhandling and personal health practices, and provided with toilet and lavatory facilities. (B.29)	
	School lunch facilities and services should be used for instruction of the students in foodhandling practices, food selection, proper eating habits and social customs. (B.30)

Both groups rejected the criterion for the prohibition of the sale of carbonated beverages, chocolate milk, gum and candy. Its consideration was upheld by a dentist who said:

> I am possibly more conscious of these items being sold than other personnel. They are cariogenic foods and I feel that they should not be for sale in schools. They are available almost everywhere else these days without bringing them into the school.

Many of the educators who commented felt that this was of little use if there were nearby stores. It was reported that in one area the board of health had asked the board of education to prohibit this but had been refused.

The quality of the school lunch was criticized. One public health worker said:

> When I came here I was horrified. The firm agreed to offer salads for sale but claimed later that the pupils would not buy them. We have tried to educate the pupils about nutrition but feel we have not been too successful.

There was criticism of the use of catering firms. Concern was expressed also about the use of volunteers, especially their lack of knowledge of sanitary foodhandling.

Summary

The proportions of the criteria endorsed by both professional groups, according to the endorsement frame of reference, are shown in Table 17.

TABLE 17

THE PROPORTION OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ENDORSED BY BOTH PROFESSIONAL GROUPS

Group of Criteria	Number of Criteria in the Group	Proportion of Criteria Endorsed by Both Groups
Health of School Personnel	6 *	.33
Emotional and Social Environment	16	.38
Physical Environment	14	.86
(Control Measures	9	.89)
(Environmental Practices	5	.80)
Safety and Accident Prevention Within Buildings and Grounds	12	1.00
Safety and Accident Prevention on Way to and from School	8	.88
School Lunch Facilities and Services	22	.82

*This includes only the criteria from Part B of the instrument.

[1]Groups in parentheses are sub-groups of a major group.

The proportion endorsed ranged from .33 in one group of criteria to 1.00 in another group. At least four-fifths of the criteria were endorsed in two-thirds of these groups.

RELATIVE AGREEMENTS BETWEEN THE RESPONDENTS ON GROUPS OF THE CRITERIA FOR HEALTHFUL SCHOOL LIVING

Analysis According to Profession

The measures of agreement according to profession are summarized in Table 18.

The average of the average differences was low.

The public health workers made as high or higher judgments on the groups of criteria for: the physical environment (and for control measures, a sub-group); for safety and accident prevention within the buildings and grounds; and for school lunch facilities and services; whereas the educators made higher judgments than the public health workers on the groups of criteria for: the emotional and social environment; for safety and accident prevention on the way to and from school; and for environmental practices (a sub-group of the group for physical environment).

The relative agreements are summarized in Chart 10.

TABLE 18

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO PROFESSION

Group of Criteria	Number of Criteria	Proportion of Criteria Endorsed by Both Groups	Profession Av. Diff. Pct.	Tau	Relative Agreement	Proportion of Criteria Judged Higher by One Group
Health of School Personnel	11[1]	.36	6	*	moderate	.60 (educ.)
Emotional and Social Environment	16	.38	9	.51	moderate	.93 (educ.)
Physical Environment	14	.86	5	*	high(mdl)[2]	.86 (health)
(Control Measures	9	.89	4	*	high	1.00 (health))[3]
(Environmental Practices	5	.80	6	*	moderate	.60 (health))
Safety and Accident Prevention Within Buildings and Grounds	12	1.00	2	*	high	.73 (health)
Safety and Accident Prevention on Way to and from School	8	.88	2	*	high	.75 (educ.)
School Lunch Facilities and Services	22	.82	5	*	high	.81 (health)
Average of Average Differences			5			

*The value is not meaningful because the average difference is not large enough to make the rankings stable.

[1]This includes criteria from Part D as well as from Part B of the instrument.

[2]Moderately different level.

[3]Groups in parentheses are not counted in determining the average of the average differences since they are sub-groups of of a major group.

CHART 10

THE COMPARISON OF THE RELATIVE AGREEMENTS ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO PROFESSION

Level of Agreement \ Relative Agreement	Low	Moderate	High
Similar		Health of School Personnel Environmental Practices	Physical Environment Control Measures Safety and Accident Prevention Within Buildings and Grounds Safety and Accident Prevention on Way to and from School School Lunch Facilities and Services
Moderately Different		Emotional and Social Environment	
Different			

There were high agreements on two-thirds of the major groups of criteria and moderate agreements on the other groups (the sub-groups were not counted).

The judgments were on a similar level on all of these groups except that for the emotional and social environment.

Analysis According to Type of Preparation

The measures according to the type of preparation are shown in Table 19.

If dual preparation makes no difference the relative agreements on the basis of profession and those between the education preparation and health preparation groups should be very similar. These measures are compared in Table 20.

There were no appreciable differences between the measures on the professional groups and those on the education and health preparation groups on any of these groups of criteria. Therefore, there is no evidence that the dual preparation made any apparent difference. The averages of the average differences were the same.

TABLE 19

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO TYPE OF PREPARATION

Group of Criteria	Type of Preparation								
	Dual and Education Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group	Dual and Health Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group	Education and Health Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group
Health of School Personnel	7	*	.82(educ.)	8	.57	.54(dual)	6	*	.82(educ.)
Emotional and Social Environment	17	.34	.94(educ.)	9	.50	.81(health)	10	.53	1.00(educ.)
Physical Environment	4	*	.77(educ.)	4	*	.83(health)	4	*	.50
(Control Measures	4	*	.89(educ.)	4	*	1.00(health)	3	*	.50)[2]
(Environmental Practices	4	*	.50	3	*	.50	6	*	.50)
Safety and Accident Prevention Within the Buildings and Grounds	4	*	.75(educ.)	4	*	.80(health)	1	*	.56(educ.)
Safety and Accident Prevention on Way to and from School	6	*	.88(educ.)	4	*	.57(health)	3	*	.83(educ.)
School Lunch Facilities and Services	5	*	.73(dual)	4	*	.71(health)	5	*	.86(health)
Average of Average Differences	7			6			5		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[2]Groups in parentheses are not counted in determining the average of the average differences as they are sub-groups of a major group.

TABLE 20

COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO PROFESSION AND TO HEALTH AND EDUCATION PREPARATION

Group of Criteria	Profession		Health Preparation and Education Preparation Groups	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Health of School Personnel	6	*	6	*
Emotional and Social Environment	9	.51	10	.53
Physical Environment	5	*	4	*
(Control Measures	4	*	3	*)[1]
(Environmental Practices	6	*	6	*)
Safety and Accident Prevention Within the Buildings and Grounds	2	*	1	*
Safety and Accident Prevention on Way to and from School	2	*	3	*
School Lunch Facilities and Services	5	*	5	*
Average of Average Differences	5		5	

*This value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1] Groups in parentheses are not counted in determining the average of the average differences as they are sub-groups of a major group.

The comparative similarities and differences in agreement between the dual and education preparation groups, and between the dual and health preparation groups should indicate if the dual preparation group made more similar judgments to the health preparation group or to the education preparation group. The dual preparation group judged as high or higher than the education preparation group on the group of criteria for school lunch facilities and services and on that for the environmental practices. The dual preparation group made as high or higher judgments than the health preparation group on the groups of criteria for: the health of school personnel; environmental practices (a sub-group); and for school lunch facilities and services but in none of these were there sizeable differences.

The average of the average differences between the dual and health preparation groups was very slightly higher than that between the education and health preparation groups , and in turn that between the dual and education preparation groups was very slightly higher than that between the dual and health preparation groups.

The dual and health preparation groups seemed to be very slightly closer in agreement than the dual and education preparation groups.

The dual preparation group made as high or higher judgments than the education preparation group only on the group of criteria for school lunch facilities and services, and on the sub-group for environ-

ment practices. The dual preparation group made as high or higher judgments than the health preparation group only on the group of criteria for the health of school personnel, and for the sub-group for environmental health practices. The criteria judged at least 10 per cent higher by the dual preparation group are shown in Appendix J.

The education preparation group made as high or higher judgments than the health preparation groups on all of these groups of criteria except that for school lunch facilities and services.

Analysis According to Length of Experience

The measures of agreement according to length of experience are shown in Table 21.

There were remarkable similarities in the relative agreements between the experience groups except on the sub-group for environmental practices where there was no agreement between the under-10-year and the 20-year-and-more experience groups, and where there was very low agreement between the 10-19-year and the 20-year-and-more experience groups.

The averages of the average differences were the same for the 10-19-year and the 20-year-and-more experience groups and for the under-10-year and the 20-year-and-more experience groups, and for the professional groups. The average of the average differences was very slightly higher for the under-10-year and the 10-19-year experience groups.

TABLE 21

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO LENGTH OF EXPERIENCE

Group of Criteria	Length of Experience: Under 10 Yrs. and 10-19 Yrs. Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group	Under 10 Yrs. and 20 Yrs. and More Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group	10-19 Yrs. and 20 Yrs. and More Av. Diff. Pct.	Tau	Proportion Judged Higher by One Group
Health of School Personnel	10	.74	.91(10 yr.)	7	*	.82(10 yr.)	7	*	.64(20 yr.)
Emotional and Social Environment	6	*	.75(10 yr.)	7	*	.50	6	*	.87(20 yr.)
Physical Environment	5	*	.71(10 yr.)	6	*	.67(20 yr.)	5	*	.92(20 yr.)
(Control Measures	3	*	.89(10 yr.)	2	*	.75(10 yr.)	2	*	1.00(20 yr.))[2]
(Environmental Practices	7	*	.60(10-19 yr.)	12	.00	1.00(20 yr.)	10	.20	.80(20 yr.))
Safety and Accident Prevention Within Buildings and Grounds	4	*	.54(10 yr.)	4	*	.70(20 yr.)	4	*	1.00(20 yr.)
Safety and Accident Prevention on Way to and from School	3	*	1.00(10 yr.)	2	*	.67(10 yr.)	3	*	1.00(20 yr.)
School Lunch Facilities and Services	7	*	.75(10 yr.)	5	*	.70(10 yr.)	4	*	.72(20 yr.)
Average of Average Differences	6			5			5		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[2]Groups in parentheses are not counted in determining the average of the average differences since they are sub-groups of a major group.

The under-10-year experience group made as high or higher judgments than the 10-19-year experience group on all of the groups of criteria except on the sub-group for environmental health practices. The under-10-year experience group made as high or higher judgments than the 20-year-and-more experience group except on the group of criteria for the physical environment (and its sub-group for environmental practices), and that for safety and accident prevention within the buildings and grounds. The criteria judged at least 10 per cent higher by the under-10-year experience group are shown in Appendix J. The 20-year-and-more experience group made higher judgments than the 10-19-year experience group on all of the groups of criteria.

Although the differences on the basis of the experience groups were very small, for the most part, the under-10-year experience group did seem to have made slightly higher judgments than either the 10-19-year or the 20-year-and-more experience groups, and the 20-year-and-more experience group made slightly higher judgments than the 10-19-year experience groups on most of the groups of criteria.

The average of the average differences between the 10-19-year and the 20-year-and-more experience group and that between the under-10-year and the 20-year-and-more experience groups were the same, while that for the under-10-year and the 10-19-year experience groups was very slightly higher.

The only group in which there were not marked similarities in agreement according to the experience groupings was the sub-group for environmental health practices in relation to the under-10-year and the 20-year-and-more experience groups, and the 10-19-year and the 20-year-and-more experience groups.

Analysis According to Range of Involvement

The measures of agreement between the involvement groups are shown in Table 22.

There were moderate to high agreements between the involvement groups on all of these groups of criteria.

Group II made as high or higher judgments on all of the groups of criteria except that for the health of school personnel. The criteria judged at least 10 per cent higher by Group I are shown in Appendix J.

The average of the average differences for the involvement groups was the same as that for the under-10-year and the 10-19-year experience groups, and that for the dual and health preparation groups.

SUMMARY AND CONCLUSIONS

Both professional groups endorsed 57 of the 88 criteria for healthful school living, a proportion of .65. The educators endorsed .75 and the public health workers endorsed .67 of these criteria.

TABLE 22

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO RANGE OF INVOLVEMENT

Group of Criteria	Group I and Group II Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
Health of School Personnel	9	.64	.82 (I)
Emotional and Social Environment	6	*	.60 (II)
Physical Environment	4	*	.79 (II) [1]
(Control Measures	4	*	.89 (II))
(Environmental Practices	4	*	.60 (II))
Safety and Accident Prevention Within Buildings and Grounds	4	*	.64 (II)
Safety and Accident Prevention on Way to and from School	6	*	.88 (II)
School Lunch Facilities and Services	4	*	.53 (II)
Average of Average Differences	6		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1] Groups in parentheses were not counted in determining the average of the average differences since they are sub-groups of a major group.

The proportion of the criteria endorsed within each group, according to the endorsement frame, ranged from .33 on the group for the health of school personnel to 1.00 on the group for safety and accident prevention on the way to and from school. At least 80 per cent of the criteria were endorsed in two-thirds of the groups of these criteria.

The measures of agreement according to profession, type of preparation, length of experience, and range of involvement, are summarized in Appendix K.

There were moderate to high relative agreements on all of the groups of criteria except that for environmental practices (between the under-10-year and the 20-year-and-more experience groups), and that for the emotional and social environment (between the dual and education preparation groups).

The educators made as high or higher judgments than the public health workers on all of the groups of criteria except those for: the physical environment and its sub-groups; safety and accident prevention within the buildings and grounds; and school lunch facilities and services.

The dual preparation group made as high or higher judgments than the education preparation group only on the group of criteria for school lunch facilities and services, and the sub-group for environmental health practices. The dual preparation group made as high or higher judgments than the health preparation group only on the groups

of criteria for the health of school personnel, and the sub-group for environmental health practices. The health preparation group made as high or higher judgments than the education preparation group only on the group of criteria for school lunch facilities and services, and for the group for the physical environment and its sub-groups.

The under-10-year experience group made higher judgments than the 10-19-year experience group on all of the groups of criteria except the sub-group for environmental health practices. The under-10-year experience group made as high or higher judgments than the 20-year-and-more experience group except on the groups of criteria for: the physical environment and its sub-group for environmental health practices; safety and accident prevention within the school buildings and grounds; and the emotional and social environment. The 20-year-and-more experience group made higher judgments than the 10-19-year experience group on all of the groups of criteria. Group I made higher judgments than Group II only on the group of criteria for the health of school personnel.

The averages of the average differences were low, and the same, for the professional groups, the education and health preparation groups, the under-10-year and the 20-year-and-more experience groups, and the 10-19-year and the 20-year-and-more experience groups; slightly higher for the involvement groups, for the under-10-year and the 10-19-year experience groups, and for the dual and health preparation

groups; and higher, but still moderate, for the dual and the education preparation groups.

Conclusions

Both professional groups endorsed .65 of the criteria for healthful school living, the educators endorsed .75 and the public health workers endorsed .67.

In general, the agreements were relatively moderate to high, and very similar on the groups of criteria for healthful school living except:

1) On the group for the emotional and social environment in which there was a slight difference on the basis of the dual and education preparation groups.
2) On the sub-group of criteria for environmental practices in which there were differences between the under-10-year and the 20-year-and-more experience groups, and between the 10-19-year and the 20-year-and-more experience groups.

There were very small differences which suggest that it may be worthwhile to watch for further evidence that:

1) In general, the educators made slightly more liberal judgments than the public health workers on the groups of criteria which might be considered as having rather direct influence on their working conditions.

2) In general, the dual preparation group made slightly more conservative judgments than either the education preparation or the health preparation groups.

3) In general, the dual preparation group made judgments slightly more similar to those of the health preparation group than to those of the education preparation group.

4) In general, the under-10-year experience group made slightly more liberal judgments than the 10-19-year experience group.

5) In general, the 20-year-and-more experience group made slightly more liberal judgments than the 10-19-year experience group.

6) In general, Group II made slightly more liberal judgments than Group I on most of these criteria for healthful school living.

These differences were so small that they suggest that the nature of the criteria may be influential, that on certain types of criteria more agreement may be expected than on other types.

CHAPTER VII

THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR HEALTH EDUCATION

The school health program must be a dynamic educational program that emphasizes constructive action in the shaping of the health behavior of the students. It must help each student to build a set of values which will encourage him to accept self-responsibility for his health, the health of his family, and ultimately the health of the community.

Health education is more than an academic subject. It is an integral part of the administrative context and the total curriculum at every level. It is a part of the general education of all students.

This cannot be accomplished by mildly interested teachers. It requires excellent professional preparation and continuing education in school health and health education of all personnel involved in the school health program.

The criteria for health education are subdivided into two groups: those for student health education, and those for professional preparation and continuing education in school health and health education for staff members.

The endorsement frame and the agreement frame are the same for these groups of criteria.

STUDENT HEALTH EDUCATION

At the Assembly of the World Confederation of the Organizations of the Teaching Profession in 1960 the delegates affirmed the right to live and to live a healthy life as a fundamental prerequisite to all other human rights. It passed this resolution:

> There must be health education for all children, from nursery school upwards. This education must tend, during the first years, to create good health habits and to direct attention to practical health problems and, with the older students, to impart more scientific instruction.[1]

THE ENDORSEMENT OF THE CRITERIA FOR STUDENT HEALTH EDUCATION

Over one-tenth of the respondents, one-half of whom were educators, commented on the guiding principle, "Health education should utilize and provide learning experiences for the purpose of favourably influencing understandings, attitudes, and habits related to individual, family, and community health and safety." Their comments revealed their recognition of health education as a vital component of the school

---

1 International Council on Health, Physical Education, and Recreation of WCOTP, Amsterdam International Congress, July 28-30, 1960 (Washington, D.C.: International Council on Health, Physical Education and Recreation, 1960), p. 33.

health program, as one said, "This is the core of the program." Concern was expressed about the adequacy of the present program, as one public health worker said, "Health instruction is violating everything we're trying to do, it is so bad that nothing could be done to hurt it."

The Planning and Conduct of Health Instruction

The endorsement of the criteria for the planning and conduct of health instruction is shown in Chart 11.

Just over one-half of these criteria were endorsed by both groups. The criteria for the provision of consultant help within the school system, for correlation with physical education and science, for informal and incidental health teaching, for individual health guidance, for objectives and methods, for teaching aids, and for comparable space were endorsed by both groups.

The largest difference between the two groups was on the criterion for the delegation of responsibility for the overall planning of health education to an individual, or group of individuals, with specific qualifications in health education in each school. Almost twice as many educators as public health workers supported this criterion. About one-fifth of the respondents, of whom two-thirds were public health workers, commented. One educator said:

CHART 11

THE ENDORSEMENT OF THE CRITERIA FOR THE PLANNING AND CONDUCT OF HEALTH INSTRUCTION ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
	Health instruction should permeate the entire curriculum and life of the school. (C.1)	
An individual, or group of individuals, with specific qualifications in health education should be delegated responsibility for the overall planning of health education within the school system, ...		and within each school. (C.2)
	Curriculum planning should involve all individuals and groups likely to contribute to health instruction. (C.3)	
	Systematically organized health instruction should be provided for all pupils in all grades. (C.9)	Systematically organized health instruction should receive attention equal to that of any major part of the curriculum. (C.10)
Health instruction should be correlated with instruction in other subject matter fields such as physical education, science, home economics, ...	social studies, and driver education. (C.11)	
Informal and more incidental, health teaching in relation to daily activities should supplement systematically organized health teaching. (C.12)		
Individual health guidance in relation to health needs and practices should supplement systematically organized health teaching.(C.13)		
The objectives and methods of health teaching should stimulate active participation of the pupils in the learning experiences, and should stress the use of health information. (C.15)		
		Students should be afforded learning experiences through field trips to community offical and voluntary health agencies, and through participation in the programmes of community official and voluntary health agencies. (C.16)
Up-to-date, authoritative, and accurate materials, and audio-visual aids, from a wide range of sources should be readily available to teachers and pupils. (C.17)		
Classroom space for health teaching should be comparable to that for other subjects, and should be adequate for the storage of models, charts, and experimental equipment. (C.18)		
	There should be a planned programme for parent education and for community understanding of the school health programme provided by the school and local department of health. (C.19)	

> I think the provincial health and education departments should set policies and broad outlines for the programmes in all schools. Then members of the two local departments should get together to determine the details applicable to them within the provincial outline for the entire health programme including curriculum.

A number of the respondents pointed out that there are not enough qualified personnel to make this practical except in very large schools, or a school system. Some said that the small schools should have access to a consultant. It seemed that this rejection might be due to awareness of a shortage of such personnel.

There was a sizeable difference of opinion on the criterion for parent education. Just over one-fifth of the respondents, more than one-half of whom were public health workers, commented. They upheld the desirability of such a program for parents but expressed concern about the extra load on the staff members of both agencies. Some of the respondents suggested that the Home and School Association might undertake such a program.

There was a considerable difference on the criterion for the involvement of all individuals and groups likely to contribute to health instruction to participate in curriculum planning. Nearly one-fifth of the respondents, one-half of whom were educators, commented. The general tone of the comments was supportive but several pointed out that "representatives" of all might be more practical, as one said, "Maybe listen to many but leave the decision to a few."

There was a large difference on the criterion for equal attention to systematically organized health instruction. Almost two-fifths of the respondents, over one-half of whom were educators, commented. Most of the respondents said that this should not mean equal time, although a few suggested equal or even more time. One respondent said, "Your health is as important as your mother tongue." An educator said:

> Provided it is interestingly organized and is in line with the times. The health programme always seems geared about three years behind what the child actually needs.

Another educator said, "It is not so much a matter of quantity of attention as it is quality of attention."

There was a large difference on the criterion for the provision of systematically organized health instruction for all pupils in all grades. Over one-quarter of the respondents, one-half of whom were educators, commented. Some suggested that only informal instruction was needed in the lower grades. Most seemed to favor systematically organized health instruction from Grades 4 to 8, and once or twice in the higher grades. A number of these respondents pointed out that the repetition in health instruction must be reduced.

Some of the respondents were critical of the correlation of health education with physical education. It was pointed out that some of the Canadian schools of physical and health education do not include health education in the undergraduate curriculum.

While correlation with science was endorsed by both groups, the comments suggested that the concept of "health science instruction" was just emerging, primarily in a few universities.

Personnel for Health Instruction

The endorsement of the criteria for personnel for health instruction is shown in Chart 12.

One-half of these criteria was endorsed by both groups. These included the criteria for the involvement of every teacher, for the specialist in the junior and senior high schools, and for involvement of professional health personnel from the school health services in certain types of activities.

The most serious rejection was that of the criterion for the classroom teacher having the major responsibility for health teaching in the elementary school. Nearly one-fifth of the respondents, less than one-half of whom were educators, commented. Most of these respondents expressed concern about their preparation. A related criterion was inserted to find out whether the respondents thought that the classroom teacher should have the assistance of a consultant, and although it was rejected, the percentages were similar. One-fifth of the respondents, over three-quarters of whom were public health workers, commented. All of the educators and most of the public health workers supported this but pointed out that it was not practical at the present time.

CHART 12

THE ENDORSEMENT OF THE CRITERIA FOR PERSONNEL FOR HEALTH INSTRUCTION ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
		The major responsibility for health teaching in the elementary school should belong to the classroom teachers. (C.4)
In junior high and high schools the responsibility for health instruction should be delegated to teachers with special preparation in health education. (C.5)		
Each teacher, no matter what his subject area, should have concern for the individual health needs, interests and health guidance of his pupils. (C.6)		
Professional health personnel should assist school personnel in determining health needs and objectives, in assessing the scientific accuracy of instructional content and teaching materials, in curriculum development, ...	in in-service education programmes, ...	in classroom teaching on occasion, and in parent education programmes. (C.7)
Such professional health personnel should include staff members involved in the school health services, ...		other staff members from the local department of health, and staff members from appropriate voluntary health agencies. (C.8)

Both groups rejected the criterion for the assistance in classroom teaching, on occasion, by the professional health personnel. Over one-seventh of the respondents, more than one-half of whom were public health workers, commented on the rarity of such occasions.

Both groups rejected the involvement of staff members from voluntary health agencies. Over one-eighth of the respondents, more than one-half of whom were public health workers, commented. Both the educators and the public health workers expressed apprehension about this. There seemed to be fear that the voluntary health agencies might act as pressure groups. One educator said, "Only on request - too many voluntary agencies have an axe to grind." Another educator said, "Only if the staff members are professionals." A public health worker suggested:

> I think that the information which these people could give should come through the health department. Disease clubs have no place in the schools. They are too biased and give undue importance to the particular disease they are interested in.

Another public health worker said:

> The growing number of voluntary agencies knocking on school doors with a "health message" demands well-defined policies. It will be a happy day when they bring their services to the schools only when teachers request them as part of a well-developed health curriculum.

Proposed Topical Content Areas

The writer hesitated about including a list of topical content areas for fear it would be interpreted as an approach to curriculum planning. It was introduced to provide the opportunity for the rejection of controversial topical areas at one end of the scale, and out-dated topical content areas at the other end of the scale. Many of the other evaluation studies have included similar lists.

The endorsement of the criteria for the proposed topical content areas is shown in Chart 13.

Over two-thirds of the proposed topical content areas were endorsed by both groups. These included some of the "controversial topics."

The largest difference was on the topic on vocations and careers in the health sciences and applied fields, which was endorsed only by the public health workers. Almost one-sixth of the respondents, nearly one-half of whom were educators, commented. Almost one-half of these respondents said that this belongs in guidance, although several pointed out that it must be included and must be up-to-date.

CHART 13

THE ENDORSEMENT OF THE CRITERIA FOR PROPOSED TOPICAL CONTENT AREAS ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:			
(a) Growth, structure and functions of the human body.			
(b) Consumer health education:			
(i) The need for health care.			
(ii) The reliability of sources of health information.			
(iii) Selection of health services and products.			
		(iv) Local and provincial health and welfare services and programmes.	
(c) Nutritional needs, good food habits, and desirable social practices and attitudes.			
(d) Dental development and dental care.			
(e) First aid procedures.			
			(f) Home nursing procedures.
(g) Safety practices for the prevention of, and protection from, accidents.			
(h) Causes and prevention of important non-communicable diseases.			
(i) Causes and prevention of important communicable diseases.			
(j) Family living.			
(i) Adolescent changes.			
(ii) The value of the family system.			
(iii) Preparation for marriage and family life (in senior high grades).			
(iv) Recognition that the family has the primary responsibility for this teaching.			
			(k) The influence of heredity in relation to personal and community health problems.
		(l) The influence of population increase in relation to personal and community health problems.	
(m) Factors affecting mental and emotional health.			
	(n) Study of personality and adjustment.		
(o) The nature of physical fitness, and the need for exercise, rest and recreation to maintain it.			
(p) The emotional, social and physical aspects of smoking, alcohol, drugs, and chemicals and toxins in the environment.			
		(q) Vocations and careers in the health sciences and applied fields.	
			(r) Developments in health research applicable to improvement of personal and community health practices.
		(s) National and international health problems and programmes. (C.14)	

There was another large difference on the topic on national and international health problems and programs. Over one-seventh of the respondents, nearly two-thirds of whom were public health workers, commented. An educator said that this should aid in the understanding of the scope of health. Several respondents suggested that this could be included in social studies.

There was a fairly high difference on the topic on the influence of population increase in relation to personal and community health but only four respondents commented on this. It was the only "controversial" area in which such a difference was noted. Only one person referred to its relation to religious beliefs.

Of the 58 criteria for student health education, .59 were endorsed by both groups, .60 were endorsed by the educators, and .78 were endorsed by the public health workers. The proportions endorsed within each group of criteria are shown in Table 23.

The proportion endorsed ranged from .28 for the sub-group on the nature and types of health instruction to .71 for the group of criteria for topical content areas.

TABLE 23

PROPORTION OF THE CRITERIA FOR STUDENT HEALTH INSTRUCTION ENDORSED BY BOTH PROFESSIONAL GROUPS

Group of Criteria	Number of Criteria in the Group	Proportion of Criteria Endorsed by Both Groups
Planning and Conduct of Health Instruction	21	.52
(Nature and Types of Health Instruction	7	.28)[1]
(Correlation with Other Subjects	5	.60)
Personnel for Health Instruction	12	.50
(Teacher Involvement	3	.67)
(Health Personnel	9	.44)
Proposed Topical Content Areas	28	.71

[1]Groups in parentheses are sub-groups.

RELATIVE AGREEMENTS BETWEEN THE RESPONDENTS ON GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION

Analysis According to Profession

The group of criteria for the planning and conduct of health instruction was subdivided into a group on the nature and types of health instruction, and a group on correlation with other subjects. Similarly, the group of criteria for personnel for health instruction was subdivided into a group on teacher involvement, and a group for health personnel.

The measures of agreement according to profession are summarized in Table 24.

The average of the average differences was in the lower range of the moderate values.

The public health workers made higher judgments than the educators on all of these groups of criteria except for the sub-group for teacher involvement.

The relative agreements are summarized in Chart 14.

There were moderate agreements on two of the major groups of criteria, that for the planning and conduct of health instruction, and that for topical content areas. There was high agreement on the major group for personnel involved in health education. There were high agreements on all of the sub-groups.

All of the agreements were on a similar level except for the sub-group for correlation with other subjects which showed extremely high agreement on a different level.

Analysis According to Type of Preparation

The measures of agreement according to type of preparation are shown in Table 25.

TABLE 24

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO PROFESSION

Group of Criteria	Profession Av. Diff. Pct.	Tau	Relative Agreement	Proportion of Criteria Judged Higher by One Group
Planning and Conduct of Health Instruction	8	.68	moderate	.72 (health)
(Nature and Types of Health Instruction	5	*	high	.67 (health)[1]
(Correlation with Other Subjects	12	1.00	high (dl)[2]	1.00 (health)
Personnel Involved in Health Education	4	*	high	.82 (health)
(Teacher Involvement	5	*	high	.67 (educ.
(Health Personnel	3	*	high	1.00 (health)
Topical Content Areas	7	*	moderate	.89 (health)
Average of Average Differences	6			

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]Groups in parentheses are not counted in determining the average of the average differences since they are sub-groups of a major group.

[2]Different level.

CHART 14

THE COMPARISON OF THE RELATIVE AGREEMENTS ON THE GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO PROFESSION

Level of Agreement \ Relative Agreement	Low	Moderate	High
Similar		Planning and Conduct of Health Instruction Topical Content Areas	Nature and Types of Health Instruction Personnel Involved in Health Education Teacher Involvement Health Personnel
Moderately Different			
Different			Correlation with Other Subjects

TABLE 25

THE COMPARISON OF THE MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO TYPE OF PREPARATION

Group of Criteria	Type of Preparation								
	Dual and Education			Dual and Health			Education and Health		
	Av. Diff. Pct.	Tau	Proportion of Criteria Judges Higher by One Group	Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group	Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
Planning and Conduct of Health Instruction	9	.61	.76 (dual)	6	*	.50	9	.70	.65(health)
(Nature and Types of (Health Instruction	11	.78	.71 (dual)	7	*	.67(dual)	8	.59	.67(health)[1]
(Correlation with (Other Subjects	12	.80	1.00 (dual)	4	*	.60(dual)	11	1.00	1.00(health)
Personnel Involved in Health Education	7	*	.54 (educ)	6	*	.50	4	*	.50
(Teacher Involvement	9	1.00	.50	3	*	.67(dual)	9	1.00	.67(educ.)
(Health Personnel	7	*	.56 (educ.)	6	*	.56(health)	3	*	.57(health)
Topical Content Areas	7	*	.59 (dual)	4	*	.68(health)	7	*	.77(health)
Average of Average Differences	8			5			7		

*The value is not meaningful because the average differences is not large enough to make the rankings relatively stable.

[1] Groups in parentheses are not counted in determining the average of the average difference as these are sub-groups of a major group.

There was marked similarity. On some groups of criteria there were no differences, on other there were slightly higher average differences between the health and education preparation groups.

The dual preparation group judged as high or higher than the education preparation group on all of the groups of criteria except for the group for personnel in health education and its sub-group for health personnel. The dual preparation group judged as high or higher than the health preparation group on all of the groups of criteria except that for topical content areas, and the sub-group for health personnel in health education.

The average of the average differences between the dual and health preparation groups was slightly lower than that between the dual and education preparation groups so it seemed that the dual and health preparation groups made slightly more similar judgments.

The health preparation group judged as high or higher than the education preparation group on all of these groups of criteria except that for personnel involved in health education and its sub-group for teacher involvement. The average of the average differences between the education and the health preparation groups was more similar to that between the dual and education preparation groups than to that for the dual and health preparation groups.

The criteria judged at least 10 per cent higher by the dual preparation group are shown in Appendix J.

There were marked similarities in the agreements on most of these groups of criteria.

If dual preparation makes no difference the relative agreements on the basis of profession and between the education preparation and health preparation groups should be very similar. These measures are shown in Table 26.

Analysis According to Length of Experience

The measures of agreement according to length of experience are shown in Table 27.

There were moderate to high agreements between the experience groups on all of these groups of criteria except that for the nature and types of health instruction (between the under-10-year and the 10-19-year experience groups).

The similarity between the 10-19-year and the 20-year-and-more experience groups was illustrated in the higher agreements and the lower average of the average differences.

The averages of the average differences were the same for the under-10-year and the 10-19-year experience groups, and for the under-10-year and the 20-year-and-more experience groups.

TABLE 26

COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO PROFESSION AND TO HEALTH AND EDUCATION PREPARATION GROUPS

Group of Criteria	Profession		Health and Education Preparation Groups	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Planning and Conduct of Health Instruction	8	.68	9	.70
(Nature and Types of Health Instruction	5	*	8	.59)[1]
(Correlation with Other Subjects	12	1.00	11	1.00)
Personnel Involved in Health Education	4	*	4	*
(Teacher Involvement	5	*	9	1.00)
(Health Personnel	3	*	3	*)
Topical Content Areas	7	*	7	*
Average of Average Difference	6		7	

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1] Groups in parentheses are not counted in determining the average of the average difference as these are sub-groups of a major group.

TABLE 27

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO LENGTH OF EXPERIENCE

Group of Criteria	Length of Experience								
	Under 10 Yrs. and 10-19 Yrs.		Proportion of Criteria Judged Higher by One Group	Under 10 Yrs. and 20 Yrs. and More		Proportion of Criteria Judged Higher by One Group	10-19 Yrs. and 20 Yrs. and More		Proportion of Criteria Judged Higher by One Group
	Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau	
Planning and Conduct of Health Instruction	7	*	.74 (10 yr.)[1]	8	.61	.55 (10 yr.)	5	*	.63 (20 yr.)[2]
(Nature and Types of (Health Instruction	12	.33	.86 (10 yr.)	10	.41	.50	7	.93	1.00 (20 yr.)[3]
(Correlation with (Other Subjects	5	*	1.00 (10 yr.)	7	*	.80 (10 yr.)	3	*	.50
Personnel Involved in Health Education	8	.56	.75 (10 yr.)	7	*	.75 (10 yr.)	5	*	.64 (20 yr.)
(Teacher Involvement	8	.82	.67 (10 yr.)	7	*	1.00 (10 yr.)	2	*	.50
(Health Personnel	8	.48	.75 (10 yr.)	7	*	.67 (10 yr.)	6	*	.67 (20 yr.)
Topical Content Areas	7	*	.84 (10 yr.)	7	*	.89 (10 yr.)	3	*	.68 (10-19 yr.)
Average of Average Difference	7			7			4		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.
[1]Under 10 years.
[2]20 years and more.
[3]Groups in parentheses are not counted in determining the averages of the average differences as they are sub-groups of a major group.
[4]10-19 years.

The under-10-year experience group judged as high or higher than either the 10-19-year, or the 20-year-and-more experience groups. The 20-year-and-more experience group judged as high or higher than the 10-19-year experience group on all of these groups of criteria except that for topical content areas.

The criteria judged at least 10 per cent higher by the under-10-year experience group are shown in Appendix J.

Analysis According to Range of Involvement

The measures of agreement between the involvement groups are shown in Table 28.

There were moderate to high agreements between the involvement groups on all of these groups of criteria.

Group I made as high or higher judgments on all of the groups of criteria except that for the planning and conduct of health instruction, its sub-group for correlation with other subjects, and that for teacher involvement.

The criteria judged at least 10 per cent higher by Group I are shown in Appendix J.

The average of the average differences for the involvement groups was low, the same as that for the dual and health preparation groups, slightly higher than that for the 10-19-year and the 20-year-and-more experience groups, and less than that for the professional groups.

TABLE 28

COMPARISON OF THE MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR STUDENT HEALTH INSTRUCTION ACCORDING TO RANGE OF INVOLVEMENT

GROUP OF CRITERIA	Involvement Gr.I and Gr.II		Proportion of Criteria Judged Higher by One Group
	Av. Diff. Pct.	Tau	
Planning and Conduct of Health Instruction	6	*	.53 (II)
(Nature and Types of Health (Instruction	6	*	.50) [1]
(Correlation with Other (Subjects	6	*	1.00 (II))
Personnel Involved in Health Education	5	*	.60 (I)
(Teacher Involvement	7	*	.67 (II))
(Health Personnel	5	*	.71 (I))
Topical Content Areas	5	*	.54 (I)
Average of Average Differences	5		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]Groups in parentheses are not counted in determining the average of the average differences as these are sub-groups of a major group.

PROFESSIONAL PREPARATION AND CONTINUING EDUCATION

At the 1960 Assembly of the World Confederation of Organizations of the Teaching Profession, the delegates passed a resolution to the effect that health education must be a compulsory part of teacher preparation.[1] The Joint WHO/UNESCO Expert Committee of World Health Organization on Teacher Preparation for Health Education said, " ... The pre-service preparation of teachers of health education takes place not only through the courses of instruction that he receives, but also through his programme of healthful living in the teacher training institution and in the school community, through his contact with student health services, and through his experience in practice teaching."[2]

While more has been said publicly about the preparation of teachers, there is as much concern about the preparation of public health workers within the profession.

In the midst of the explosion of knowledge, continuing education is becoming a necessity, not a luxury, for both educators and public health workers.

---

[1] International Council on Health, Physical Education and Recreation of the World Conference of Organizations of the Teaching Profession, p. 33.

[2] World Health Organization, Teacher Preparation for Health Education, Report of a Joint WHO/UNESCO Expert Committee, Technical Report Series No. 193 (Geneva: World Health Organization, 1960), p. 4.

The guiding principle, "All personnel involved in the school health programme should be adequately prepared and encouraged to participate in continuing education programmes," was commented on by only 6 per cent of the respondents. Most of their comments supported the idea but cautioned about the lack of qualified personnel and current work loads.

THE ENDORSEMENT OF CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION

Professional Preparation in School Health and Health Education

The endorsement of the criteria for professional preparation is shown in Chart 15.

Less than one-half of these criteria for professional preparation were endorsed by both groups.

The greatest difference was on the criterion for comprehensive preparation in school health and health education for all teachers. Almost one-quarter of the respondents, nearly two-thirds of whom were public health workers, commented. The majority suggested that the word "comprehensive" be changed to "adequate." Most of these respondents supported the idea of preparation in health for all teachers but were concerned about the quantitative connotation.

CHART 15

THE ENDORSEMENT OF CRITERIA FOR PROFESSIONAL PREPARATION IN SCHOOL HEALTH AND HEALTH EDUCATION ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
Specialized health personnel should be certified or licensed in their respective fields of competence, ...	should meet, or surpass, the minimum professional qualifications recommended by the provincial department of health, and the minimum recommended qualifications of the Canadian Public Health Associations. (C.20)	should be prepared in public health,
	Comprehensive preparation in school health and health education should be required of all prospective teachers to meet the minimum licensing requirements of education. (C.21)	
Special preparation for health teachers for junior high and senior high schools in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include work in the biological sciences, in the social sciences, ...	and in the physical sciences. (C.22)	
Special preparation for health teachers for junior and senior high schools should include professional health courses in teacher preparation in order to meet the minimum requirements of the provincial departments of education for specialist standing. (C.23)		

A serious rejection was that on the criterion that specialized health personnel should be prepared in public health. Over one-seventh of the respondents, more than one-half of whom were public health workers, commented. Almost all of them said that this depended upon their functions.

On the criterion for specialized health personnel meeting, or surpassing, minimum qualifications of the provincial department, over one-tenth of the respondents, more than two-thirds of whom were educators, commented. Most of them said that this depends on whether these are adequate. As one educator said, "To be authoritative and command respect in one's position one must be recognized as qualified." On the criterion for meeting, or surpassing, the recommendations of the Canadian Public Health Association, over one-tenth of the respondents, one-half of whom were educators, commented. It was apparent that neither the public health workers nor the educators were too familiar with these.

Continuing Education in School Health and Health Education

The endorsement of the criteria for continuing education in school health and health education is shown in Chart 16.

CHART 16

THE ENDORSEMENT OF THE CRITERIA FOR CONTINUING EDUCATION IN SCHOOL HEALTH AND HEALTH EDUCATION ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by the Public Health Workers Only	Not Endorsed by Either Group
All new professional health personnel to serve schools should become acquainted with the administrative and instructional programmes and problems of the schools through pre-service or orientation programmes. (C.24)		
All new administrators and teachers should become acquainted with the public health programmes and problems during pre-service or orientation programmes. (C.25)		
A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. (C.26)		More informal in-service learning experiences should be planned in relation to supervision, consultation, service on functional school and community health committees, and participation in health organizations. (C.27)
	In-service programmes should be provided for non-instructional school personnel such as food-handlers, ...	bus drivers, and custodians. (C.28)

Less than one-third of the criteria for continuing education in school health and health education were endorsed by both groups. All of these related to the more professional and more formal types of continuing education.

The largest difference was on the criterion for in-service programs for foodhandlers, a criterion endorsed by the public health workers but not by the educators. Over one-tenth of the respondents, more than one-half of whom were public health workers, commented. The public health workers felt that this was important, especially at the beginning of their employment. Some pointed out the difficulty of reaching the part-time foodhandlers, expecially the volunteers.

Educators expressed some concern about the burden of continuing education. One said, "It is my opinion that more teachers are having "mental" breakdowns from an excess of in-service courses than from any other cause. Another said, "Teaching and associated activities require about 80 hours per week of my time."

Of the 19 criteria for professional preparation and continuing education, .37 were endorsed by both professional groups and by the educators, and .63 by the public health workers. The proportions endorsed within each of the groups of criteria are shown in Table 29.

TABLE 29

THE PROPORTION OF CRITERIA FOR PROFESSIONAL PREPARATION AND FOR CONTINUING EDUCATION ENDORSED BY BOTH PROFESSIONAL GROUPS

Group of Criteria	Number of Criteria	Proportion of Criteria Endorsed by Both Groups
Professional Preparation	9	.44
Continuing Education	10	.30

RELATIVE AGREEMENTS BETWEEN THE RESPONDENTS ON GROUPS OF CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION

Analysis According to Profession

The measures of agreement according to profession are shown in Table 30.

TABLE 30

THE COMPARISON OF THE MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION ACCORDING TO PROFESSION

Group of Criteria	Profession Av. Diff. Pct.	Tau	Relative Agreement	Proportion of Criteria Judged Higher by One Group
Professional Preparation	9	.93	high (dl)[1]	.89 (health)
Continuing Education	11	.52	moderate (dl)	.90 (health)
Average of Average Difference	10			

[1] Different level.

There was high agreement, on a different level, between the professional groups on the criteria for professional preparation, and moderate agreement, on a different level, on the criteria for continuing education.

The public health workers judged higher than the educators on both of these groups of criteria.

The average of the average differences was high.

Analysis According to Type of Preparation

The measures of agreement according to type of preparation are shown in Table 31.

There was relatively low agreement on a different level between the dual and education preparation groups on the group of criteria for professional preparation. The relative agreements between the other groups of respondents were moderate.

The much lower average of the average differences between the dual and health preparation groups suggested that their judgments were more similar.

The comparison of the measures according to the professional groups and according to the education and health preparation groups are shown in Table 32.

TABLE 31

THE COMPARISON OF THE MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION ACCORDING TO TYPE OF PREPARATION

Group of Criteria	Type of Preparation								
	Dual and Education Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher ny One Group	Dual and Health Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group	Education and Health Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
Professional Preparation	10	.33	.50	9	.63	.78 (health)	11	.65	.89(health)
Continuing Education	16	.63	.90 (dual)	6	*	.70 (dual)	14	.63	.90(health)
Average of Average Differences	13			7.5			12.5		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

TABLE 32

COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION ACCORDING TO PROFESSION AND TO HEALTH AND EDUCATION PREPARATION GROUPS

Group of Criteria	Profession		Health and Education Preparation Groups	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Professional Preparation	9	.93	11	.65
Continuing Education	11	.52	14	.63
Average of Average Differences	10		12.5	

The average of the average differences between the professional groups was not quite as high as that between the health and education preparation groups.

The health preparation group judged higher than the dual preparation group on the criteria for professional preparation. The dual preparation group judged higher than the education preparation group or the health preparation group on the criteria for continuing education. The health preparation group judged higher than the education preparation group on both groups of criteria.

The criteria judged at least 10 per cent higher by the dual preparation group are shown in Appendix J.

In summary, there was closer agreement between the judgments of the dual and health preparation groups than between the judgments of

any of the other preparation groups. There was low agreement between the dual and education preparation group on the criteria for professional preparation. The dual preparation group judged higher than the health preparation group on the criteria for continuing education while the health preparation group judged higher than the dual preparation group on the criteria for professional preparation.

Analysis According to Length of Experience

The measures of agreement according to length of experience are shown in Table 33.

There were moderate to high agreements between the experience groups on both of these groups of criteria.

The average of the average differences for the under-10-year and the 10-19-year experience groups was almost the same as that for the 10-19-year and the 20-year-and-more experience groups.

The 20-year-and-more experience group made higher judgments than either the under-10-year or the 10-19-year experience groups.

The criteria judged at least 10 per cent higher by the under-10-year experience group are shown in Appendix J.

In general, the 20-year-and-more experience group made more liberal judgments than either the 10-19-year or the under-10-year experience group on these groups of criteria.

TABLE 33

THE COMPARISON OF THE MEASURES OF AGREEMENT ON CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION ACCORDING TO LENGTH OF EXPERIENCE

Group of Criteria	Length of Experience								
	Under 10 Yrs. and 10-19 Yrs.		Proportion of Criteria Judged Higher by Ont Group	Under 10 Yrs. and 20 Yrs. and more		Proportion of Criteria Judged Higher by One Group	10-19 Yrs. and 20 Yrs. and More		Proportion of Criteria Judged Higher by One Group
	Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau		Av. Diff. Pct.	Tau	
Professional Preparation	9	.80	.78 (10-19 yr.)[1]	12	.65	.89 (20 yr.)[2]	8	.57	.88 (20 yr.)
Continuing Education	7	*	.50	6	*	.78 (20 yr.)	7	*	1.00 (20 yr.)
Average of Average Differences	8			9			7.5		

*The value is not meaningful because the average difference is not large enough to make the rankings stable.

[1] 10-19 years.

[2] 20 years and more.

Analysis According to Range of Involvement

The measures of agreement between the involvement groups are shown in Table 34.

There were high agreements on both groups of criteria, that on professional preparation on a similar level, that on continuing education on a different level.

The average of the average differences was moderate, the same as that for the under-10-year and the 10-19-year experience groups, and similar to that for the 10-19-year and the 20-year-and-more experience groups, and the dual and health preparation groups.

The criteria judged higher by Group I than by Group II are shown in Appendix J.

SUMMARY AND CONCLUSIONS

Both professional groups endorsed .59 of the criteria for student health instruction and .37 of the criteria for professional preparation and continuing education in school health and health education. Educators endorsed .60 of the criteria for student health instruction and .37 of the criteria for professional preparation and continuing education, while the public health workers endorsed .78 of the criteria for student health instruction and .63 of the criteria for professional preparation and continuing education.

TABLE 34

THE COMPARISON OF THE MEASURES OF AGREEEMENT ON THE CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION ACCORDING TO RANGE OF INVOLVEMENT

Group of Criteria	Group I and Group II Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
Professional Preparation	5	*	.63 (I)
Continuing Education	11	.72	1.00 (I)
Average of Average Differences	8		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

The range in the proportions of criteria endorsed by both professional groups extended from .28 for the sub-group on the nature and types of health instruction to .71 for that on topical content areas.

The measures of relative agreements according to profession, type of preparation, length of experience and range of involvement are summarized in Appendix K.

There were moderate to high agreements on all of the groups of criteria except that for the nature and types of health instruction (between the under-10-year and the 10-19-year experience groups), and that for professional preparation groups).

The public health workers made higher judgments than the educators on all of the groups of criteria except the sub-group for teacher involvement. The dual preparation group made as high or higher judgments on all of the groups of criteria except the group for personnel for health instruction and its sub-group for the involvement of health personnel. The dual preparation groups made as high or higher judgments than the health preparation group on all of the groups of criteria except those for topical content areas, for professional preparation, and the sub-group for the involvement of health personnel. The health preparation group made as high or higher judgments than the education preparation group on all of the groups of criteria except for the sub-group for teacher involvement. The under-10-year experience group judged as high or higher than the 10-19-year experience group on all of the groups of criteria except that for professional preparation. The under-10-year experience group made as high or higher judgments than the 20-year-and-more experience group on all of the groups of criteria for student health instruction but the 20-year-and-more experience group made higher judgments than the under-10-year experience group on the groups of criteria for professional preparation and for continuing education. The 20-year-and-more experience group judged as high or higher than the 10-19-year experience group on all of the groups of criteria except that for topical content areas. Group I made as high or higher judgments than

Group II on all of the groups of criteria except that for the planning and conduct of health instruction, the sub-group for correlation with other subjects, and the sub-group for teacher involvement.

The averages of the average differences were lower for the groups on student health instruction than for the groups on professional preparation and continuing education.

Conclusions

Both professional groups endorsed .59 of the criteria for student health instruction and .37 of the criteria for professional preparation and continuing education.

In general, the agreements were moderate to high on the groups of criteria for health education with the exception of:

1) There was low agreement on a different level between the under-10-year and the 10-19-year experience groups on the sub-group of criteria for the nature and types of health instruction.

2) There was low agreement on a different level between the dual and education preparation groups on the group of criteria for professional preparation.

There were small differences which suggest that it is worthwhile watching for further evidence that:

1) In general, public health workers made more liberal judgments than the educators on most of these groups of criteria.

2) In general, the dual preparation group made as liberal or more liberal judgments than the education preparation group, and as liberal, or more liberal judgments than the health preparation group on most of these groups of criteria.

3) In general, the dual preparation group and the health preparation group made slightly more similar judgments than the dual and education preparation groups.

4) In general, the under-10-year experience group made more liberal judgments than either the 10-19-year or the 20-year- and more experience groups on the groups of criteria for student health instruction, but made more conservative judgments on the groups of criteria for professional preparation and continuing education.

5) Group I made more liberal judgments than Group II on some of the groups of criteria for student health instruction and on both of the groups for professional preparation and continuing education.

Although the differences were small, there is a suggestion that the educational nature of the criteria may have been influential.

CHAPTER VIII

THE "DEFINITELY APPLICABLE" JUDGMENTS ON THE CRITERIA FOR SCHOOL HEALTH SERVICES

School health services in Canadian schools began as isolated programs established by local boards of education to provide assistance to children with conditions that interfered with their education, and if possible to prevent such conditions. From this early focus on the provision of minor treatment and the prevention of the spread of disease, the school health services evolved into a preventive and educational program. In the course of this evolution, it was recognized that the Canadian school health program should be both a part of the educational program and a part of the community public health program.

Today, school health services are an important part, but not the total, of the health services for children and youth of school age. The foundations, on which they are built and developed, begin in the early prenatal period and continue through infancy and the preschool period. The school health services are related also to those services provided for adult groups in the community. The school health services are a vital part of a network of interrelated private and public health services. Contemporary school health services

recognize that the parents have the primary responsibility for the health of their children and youth, and seek to assist them to carry out these responsibilities, but not to assume them.

The endorsement and the agreement frames are the same for some groups of criteria but not for all.

THE ENDORSEMENT OF THE CRITERIA FOR SCHOOL HEALTH SERVICES

The guiding principle, "School health services should be organized to protect, promote and restore the health of students and staff, to assist in adapting the educational programmes to the mental and physical abilities and needs of pupils, and to utilize fully the community resources to meet the health needs of children and youth without gaps or duplication of facilities and services." was commented on by almost one-quarter of the respondents, nearly two-thirds of whom were public health workers. One-third of these respondents questioned the word "restore" and suggested that there should be assistance in such restoration. Some requested that the reference to the health of staff members be deleted, that the program should be a student program.

The Nature of School Health Services

The endorsement of the criteria for the nature of school health services is shown in Chart 17.

CHART 17

THE ENDORSEMENT OF THE CRITERIA FOR THE NATURE OF SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Not Endorsed by Either Group
All school health service activities should provide positive learning experiences for the students, and be utilized in health teaching. (D.1)	
School health services should make provisions to appraise the health status of pupils;	to appraise the health status of staff members;
to encourage and facilitate the correction of remediable defects; assist the pupil to adjust to non-remediable defects; counsel students; counsel parents, through home visiting when indicated; help prevent and control disease;	counsel staff members; plan for the health supervision of school personnel;
plan for the emergency care of injured and severely ill students and staff members; assist in the identification of exceptional pupils; assist in planning for the health supervision of exceptional pupils; assist in adapting the school programme to meet the needs of exceptional pupils; and coordinate the community resources to meet the health needs of pupils. (D.2)	

Over four-fifths of these criteria were endorsed by both groups. These included all that were pupil-centred, but none that were staff-centred.

More than one-quarter of the respondents commented on the criterion for the appraisal of the health status of staff members. Their comments were consistent with those in the group of criterion for the health of school personnel. The educators were more in favor of appraisal of the health status of staff members than the public health workers.

Both groups rejected the criterion for the school health services making provisions to plan for the health supervision of school personnel. Less than one-fifth of the respondents, most of whom were public health workers, commented. They pointed out that these were adults who should accept responsibility for their own health.

Both groups rejected the criterion for the school health services making provisions for counseling staff members. One-fifth of the respondents, over one-third of whom were educators, commented. Nearly one-third of these respondents felt that this should be provided if requested. One public health worker said, "Staff members should be made to feel that they can seek counsel, but for medical care and services they should not depend upon the school health services." Several respondents said that they might be referred elsewhere for

counseling. Counseling about a student's problem was differentiated, and approved, by some of these respondents.

The largest difference between the judgments of the educators and those of the public health workers was on the criterion for counseling parents, although it was endorsed by both groups. Very few commented. One educator suggested that less time-consuming ways than home visiting might be used.

Another large difference was on the criterion for the appraisal of the health status of the pupils. Over one-tenth of the respondents commented on this criterion, almost all of whom were public health workers. Most of these respondents said that the school health services should ensure appraisal, but that more and more appraisal was being done by the family physicians.

The Planning of School Health Services

The endorsement of some criteria for the planning of school health services is shown in Chart 18.

Less than one-half of the criteria for the planning of school health services were endorsed by both groups.

CHART 18

THE ENDORSEMENT OF THE CRITERIA FOR THE PLANNING OF SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
		If the local board of education wants more extensive school health services than the local board of health can provide, it should contract with the local board of health for the purchase of additional services rather than establish supplementary health services. (D.6)
	Individual teacher-nurse conferences should be held regularly to discuss the teacher's health observations,	
and to share information about the health status of pupils including reports of screening procedures and examinations. (D.9)		
	In schools where each pupil has a number of different teachers every day, the home-room teacher should be recognized as having responsibility for the daily health supervision and guidance of the pupils. (D.10)	
In large schools, a liaison committee, composed of such persons as the principal, vice-principal, school health physician, public health nurse, guidance director, physical and health education directors and other appropriate individuals, should function to facilitate exchange of information and joint planning. (D.11)		

There was a very large difference on the criterion for individual teacher-nurse conferences "to discuss the teacher's health observations." This was endorsed by the public health workers but not by the educators. Both groups endorsed the companion criterion for the teacher-nurse conferences "to share information about the health status of the pupils." Less than one-fifth of the respondents, over one-half of whom were educators, commented on the teacher-nurse conferences. One educator said, "Very little follow-up is ever done upon the recommendation of the teacher." Another educator said, "Often these conferences are held too late to help the teacher and the pupils." A number suggested that the word "regularly" be changed to afford flexibility in relation to need. Only one public health worker expressed confidence in the teacher's ability to supply valuable information. One educator pointed out that this was usually done by a memorandum to the public health nurse.

The public health workers endorsed the criterion for the responsibility of the homeroom teacher for the daily health supervision and guidance of the pupils whereas the educators rejected it. Over one-quarter of the respondents, more than two-fifths of whom were educators, commented. Some pointed out that the homeroom teacher may see the pupils only for a few minutes in the morning, and that this is practical only if the homeroom teacher teaches these pupils. Others said that this was a responsibility of the physical and health

education teachers or the guidance counselors.

Both groups rejected the criterion for the proposals for extension of the school health services. There was more support for the criterion for the local board of education contracting with the local board of health for the purchase of additional services, especially on the part of the public health workers.

Personnel for School Health Services

The availability of professional health personnel, and concern about their utilization, have been pointed out as current problems. Auxiliary personnel are being used in some of the large cities. Although the introduction of the social worker as a member of the health team was advocated in 1950,[1] this was reported only in one metropolitan health unit.[2]

The endorsement of the criteria for personnel for school health services is shown in Chart 19.

---

[1] Canadian Public Health Association, Report of the Study Committee on Public Health Practice in Canada (Toronto: The Association, 1950), p. 65 and p. 74.

[2] Metropolitan Health Committee for Greater Vancouver, Vancouver, British Columbia.

CHART 19

THE ENDORSEMENT OF THE CRITERIA FOR PERSONNEL FOR SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
Specialized health personnel should be available on an adequate time basis related to the needs of the students. . . .	the nature of the educational programme,		
and the community health problems. (D.3)		Auxiliary personnel, such as the certified nursing assistant, the audiometric technician and the clerk, should be employed under the direct supervision of qualified professional health personnel to release the professional worker from tasks not requiring professional competencies. (D.4)	
			The social worker should be introduced in an advisory capacity to professional health workers, educational administrators and teachers, and as a member of the staff of the local department of health. (D.5)

One-third of the criteria for personnel for school health services were endorsed by both groups. These were related to the availability of personnel on an adequate time basis.

The largest difference was on the criterion for the use of auxiliary health personnel, endorsed by the public health workers but rejected by the educators. Over one-seventh of the respondents, more than one-half of whom were public health workers, commented. Most of these respondents expressed support but some concern was voiced about the expense, and suggestions were made that volunteers might be used.

The criterion for the availability of specialized health personnel related to the nature of the educational program was endorsed by the educators and rejected by a very small margin by the public health workers.

Both groups rejected the criteria for the introduction of social workers. Over one-tenth of the respondents, two-thirds of whom were public health workers, commented on the criterion for the introduction of the social worker in an advisory capacity. They pointed out the acute shortage of qualified social workers. One said, "Professional health workers are in a position to advise the social worker, not vice versa." Another public health worker who had had experience with the social workers in a health department said, "It is my opinion and that of others on the staff of . . . that the social

worker should function only as a member of the medical team." The criterion for the social worker as a member of the staff of the local department of health was commented on by over one-quarter of the respondents, three-quarters of whom were public health workers. More resistance was expressed by these respondents. One said that a social worker from a social agency can be introduced when needed. Another said, We now need more cooperation between welfare and public health workers in their separate entities." A number suggested priority for the addition of other workers, as one educator said, "I'd rather have an extra person in guidance or in remedial services." One respondent described a coordinating committee in one city where the representatives of the various health and welfare agencies met regularly to decide who should accept the major responsibility for multi-problem families.

Health Appraisals

The health appraisal is the major approach used in the school health services to determine the health needs of the individual student, or of groups of students. It includes screening tests, medical examinations, dental health services, mental health services, the utilization of the cumulative school health records, and counseling and follow-up services.

The endorsement of some general criteria for health appraisals is shown in Chart 20.

CHART 20

THE ENDORSEMENT OF SOME GENERAL CRITERIA FOR HEALTH APPRAISALS ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Not Endorsed by Either Group
Health appraisal procedures should include teachers' observations and referrals, screening tests, ...	medical and dental examinations,	psychological and psychiatric examinations,
the utilization of cumulative health records, and counseling and follow-up procedures for students with suspected or known defects. (D.7)		
	The classroom teacher should participate in the health appraisals to more clearly understand the health needs of pupils in relation to their performance. (D.8)	

Over one-half of these general criteria for health appraisals were endorsed by both groups. All of these were definitive criteria.

Educators endorsed the criterion for health appraisal procedures including medical and dental examinations, the public health workers failed to endorse it by an extremely narrow margin, but there was a large difference in the percentages of the two groups. Almost all of the more than one-seventh of the respondents who commented on this criterion were public health workers. They indicated that the medical and dental examinations should be done by the private practitioners. One respondent said, "Medical and dental examinations should not be repeated by the health department personnel when they have been carried out previously by private doctors and dentists." Another said, "These should be done only in low income areas, or where services are not readily available. They could be important in remote areas."

Both groups rejected the criterion for the inclusion of psychological examinations. More than one-quarter of the respondents, most of whom were public health workers, commented. Most referred to the availability of personnel and the need of the students. It seemed that they were supportive, on a selective basis, if qualified personnel were available.

Similarly, both groups rejected the criterion for the inclusion of psychiatric examinations. Over one-third of the respondents,

almost three-quarters of whom were public health workers, commented. Almost one-half indicated that these should be included when necessary. About one-quarter of the respondents felt that referrals should be made to a psychiatrist in private practice, or in a clinic. Some referred to the availability of the psychiatrists and the costs. One educator said that in one area there were waiting periods of up to 15 months for needy pupils. In general, the comments supported the inclusion of psychiatric examinations, on a limited basis, either by arrangement for selected students, or by referral.

Screening Tests

Screening tests are procedures used in health appraisals to identify students in need of further investigation. They are not diagnostic tests. They are used in an effort to prevent what Getting has described:

> . . . Too often children develop early in life, conditions which are correctible but are not attended to early enough. As a subsequence, many reach adult life with defects or disabilities which may have interfered with their education, their selection of a career or their ability to meet the full responsibility of family and community life.[1]

The endorsement of the criteria for screening tests is shown in Chart 21.

---

[1]Vlado A. Getting, A Study of Administration and Programmes of Health Departments of Halifax, Dartmouth and Municipality of Halifax County, Nova Scotia (Nova Scotia: Department of Public Health, 1963), p. 189.

CHART 21

THE ENDORSEMENT OF THE CRITERIA FOR SCREENING TESTS ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
Adequate preparation for screening tests should include preparation of pupils, teachers, and parents. (D.12)		
Vision screening tests should be provided with a lighted Snellen chart (and/or other methods approved by the provincial department of health); for all pupils referred by self, teacher, and/or parents; for all pupils at appropriate intervals; including colour vision screening once in an upper grade of the elementary school. (D.13)		
Hearing should be screened with a pure tone audiometer (and/or other methods approved by the provincial department of health); for all pupils referred by self, teacher, and/or parents with suspected hearing loss or speech defect; and for all pupils at appropriate intervals. (D.14)		
		As part of the school health services, measurements of height and weight should be determined and recorded only for those for whom surveillance of the growth pattern is indicated. (D.15)
Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals. (D.16)		
All positive reactors to the tuberculin test should be given a chest x-ray at once, repeated at intervals dependent upon the findings. (D.17)		
	The introduction of other screening tests should be discussed with the local medical and/or dental society. and	with appropriate voluntary health agencies. (D.18)

Four-fifths of the criteria for screening tests were endorsed by both groups.

The public health workers endorsed the criterion for the discussion of the introduction of other screening tests with the local medical and/or dental society, while the educators rejected it. Less than one-tenth of the respondents, only one of whom was an educator, commented. Most of them suggested that the decisions should be made by the health department, and then might be announced to these societies.

The criterion for measurements of height and weight for only those pupils for whom the surveillance of the growth patternis indicated was rejected by both groups, and there was a large difference in percentages. Over one-tenth of the respondents commented, more than one-half of whom were public health workers. One respondent said that children who require this attention are usually under the care of a doctor. A related item was introduced in the instrument to determine whether there was recognition of the out-dated nature of weighing and measuring all pupils two or three times a year. Most of the public health workers said that this was a waste of time. A few of the educators said that it could be an effective teaching experience.

Both groups rejected the criterion for discussion of the introduction of other screening tests with the appropriate voluntary health agencies. Over one-tenth of the respondents, more than two-thirds

of whom were public health workers, commented. Some of these respondents felt that this was important because some of the voluntary agencies help to secure glasses, hearing aids and other things for needy children, some voluntary agencies provide special services, and some can help to obtain public acceptance and support.

Medical Examinations

Although Phair cast some doubt on the effectiveness of mass medical examinations of students nearly 35 years ago,[1] and referral to the family physican was advocated officially in Canada in 1950,[2] there has been great variation in practice, with a trend toward examination by the family physician.[3]

The endorsement of the criteria for medical examinations is shown in Chart 22.

Just over one-third of the criteria for medical examinations were endorsed by both groups. All of these were related to the quality of the medical examinations provided in the school health services.

---

[1] John T. Phair, "Effectiveness of Child Health Programs in Ontario by Survey Methods," American Journal of Public Health, XXIII (January, 1933), pp. 1-9.

[2] Canadian Public Health Association, op. cit., p. 28.

[3] Brown and Schwenger, pp. 33-34

CHART 22

THE ENDORSEMENT OF THE CRITERIA FOR MEDICAL EXAMINATION ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
	The physician who attends the pupil regularly should be encouraged to do the routine medical examinations of the pupil. (D.19)	
	A parent should be present at any medical examination of the young pupil whether in the physician's office, school health services, or clinic. (D.20)	
	There should be plans for parental counseling with regard to the older pupil who may not want the parent present during the medical examination if the findings suggest the need for follow-up procedures. (D.21)	
		The school health physician should examine routinely, or arrange for the examination of, those pupils who are not able to obtain an examination from a private physician or clinic. (D.22)
		Referral medical examinations should be provided by the school health physician for those pupils referred by the public health nurse, teacher, and/or parent, with suspected or known liabilities not under medical supervision. (D.23)
Medical examinations provided in the school health services should be of a quality to command medical respect, to provide sufficient information to guide counseling of pupils and parents, and to provide a desirable learning experience for the pupil. (D.24)		

A very large difference was evident on the criterion for a parent being present at any medical examination of the young pupil. Over one-quarter of the respondents, almost three-quarters of whom were public health workers, commented. Their remarks suggested that the respondents believed that the parents should be notified, at least, and invited when there is any suspicion of a health problem. The employment of both parents presents a problem according to most of these respondents. One educator said, "It is imperative, it can be used almost entirely as a teaching period for the parents when they are most receptive, and both parents should be welcome, invite the fathers." Only two respondents suggested that it was better sometimes if the parent was not present.

There was a sizeable difference on the criterion for parental counseling with regard to the older pupil, and endorsation by the public health workers but not by the educators. About one-tenth of the respondents, almost all of whom were public health workers, commented. A few felt that this should be arranged only with the knowledge of the student. Some said that it was not necessary if correction can be achieved by working through the student.

There was a large difference on the criterion for the family physician doing the routine medical examinations of the pupil with high endorsement by the public health workers and rejection by the educators. Nearly one-fifth of the respondents, two-thirds of whom

were public health workers, commented. There was some concern about the adequacy of these examinations, and the difficulty of getting adequate reports. Some felt that there was a place for the school medical examination. A number indicated that three such examinations were still being given during the years of school attendance.

There was another large difference between the educators and the public health workers on the criterion for the provision of routine medical examinations for pupils who are not able to obtain an examination from a private physician or a clinic, although it was rejected by both groups. About one-quarter of the respondents, seven-tenths of whom were public health workers, commented. Some said that these should be referred to a general practitioner. Others suggested that there should be a choice about how they are done. Some said that they should be done in the school. It was pointed out that in the rural school it may be preferable to examine all of the pupils.

The criterion for referral examinations for pupils with suspected or known defects was rejected by both groups. Nearly one-fifth, over three-quarters of whom were public health workers, commented. About one-third said that the pupil should be sent to the family physician, as one public health worker said, "Perhaps it is a waste of time if the family doctor is going to do the actual diagnosis and treatment." Another public health worker supported the criterion:

> Yes, and a lot more. A deaf child's parents may be told that he is retarded. We can't just sit around and watch this happen.

Only a few respondents pointed out that the introduction of a national medicare (physicians' services) scheme could reduce medical examinations in the school.

Dental Health Services

There is awareness of the magnitude of the dental problems among children. Following an examination of about 60,000 children, it was reported that:

> ... What has been seen can be described as something resembling an avalanche of decayed teeth, jaw abscesses with fistulas discharging pus into the mouth and abnormalities of growth and development from the premature loss of teeth. By the time they reach Grade VIII, ninety-nine per cent of the children have tooth decay, and a great deal of it, unless they happen to be living in an area where the water contains fluoride. Seven to ten per cent have a more or less serious degree of malocclusion. Most of them have gingivitis and unclean mouths . . . Even if we were to direct all of the treatment work of Canada's 5,000 dentists to the care of elementary school children alone they could not handle the backlog of oral disease and abnormalities in that group. . .[1]

The endorsement of the criteria for dental health services is shown in Chart 23.

---

[1] H.K. Brown, "Where are We Going with Dental Health Programs?," Canadian Journal of Public Health, XLVIII (July, 1957), p. 282.

CHART 23

THE ENDORSEMENT OF THE CRITERIA FOR DENTAL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
The dental health services should be preventive and educational in nature. (D.25)		
	If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries. (D.26)	
		In rural areas where water systems cannot readily be fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries. (D.27)
School dental inspections should be utilized to estimate group dental needs, ...	and to facilitate community planning to meet dental needs. (D.28)	
Pupils should be referred to the family dentist and dental clinic for routine examination and correction of dental defects. (D.29)		
If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately. (D.30)		
Dental emergencies that occur when the dental staff members are in the school should be given temporary palliative treatment, if necessary, and referred to the family dentist or dental clinic. (D.31)		

Over three-fifths of the criteria for dental health services were endorsed by both groups. These were related to the nature of and the use of the dental health services.

There was a large difference between the percentages of the two groups on the criterion for fluoridation of the community water supply. About one-tenth of the respondents, only two of whom were educators, commented. One public health worker said, "It's too bad that our democratic ideals lead us into the mistake of letting the voters decide if the water supply should be fluoridated."

Both groups rejected the criterion for the topical application of fluoride. Over one-quarter of the respondents, nearly four-fifths of whom were public health workers, commented. Some pointed out that this was used also to supplement the fluoridation of public water supplies. Many mentioned the serious shortage of dentists and dental hygienists as a deterrent to the implementation of this criterion.

Mental Health Services

Awareness of the incidence of mental illness is resulting in greater attention to the mental health of children. At the end of 1963, one out of every 252 persons in Canada was enrolled in one of the 149 psychiatric institutions. They constituted 41 per cent of all hospital patients.[1]

---

[1] Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, May 6, 1966), p. 3.

The endorsement of the criteria for mental health services is shown in Chart 24.

Less than one-half of the criteria for mental health services were endorsed by both groups. Most of those endorsed were related to provisions for mental health services and to the involvement of professional health personnel in the services.

There was a large difference on the criterion for provisions for psychiatric examination and assessment for students with emotional, social and behavior problems. About one-fifth of the respondents commented, over one-half of whom were public health workers. Most of these respondents wanted to qualify this on the basis of need because of the shortage of qualified psychiatrists. One public health worker said:

> Over-referral has been the complaint of many clinical psychiatrists. Mild problems could have been handled just as well by the public health nurse, in some instances with help from a psychologist or social worker.

Another large difference was evident on the criterion for special class placement. Over one-seventh of the respondents, more than one-half of whom were public health workers, commented. Most of these respondents restricted this criterion on the basis of need. Some spoke of the role of the medical officer of health in approving special class placement. One public health worker said:

> No child should be placed in a special class after only simple psychological testing and on a teacher's recommendation. Special placement should be made after assessment by a team and with interpretation to the parents.

CHART 24

THE ENDORSEMENT OF THE CRITERIA FOR MENTAL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
Provisions for identifying, assessing and securing help for students with emotional, social, and behaviour problems should include psychological examinations and evaluations, social evaluation of the pupil and his home, counseling pupil and parents,	psychiatric examinations and assessments, and special class placements. (D.32)	
The services of child guidance clinics, and/or mental health clinics, should be available for any student in need of further assessment and therapy. (D.33)		
School health personnel should participate in the procedures of child guidance clinics, and mental health clinics, in referral, in preparation of the social evaluation (case history), in case conferences and in follow-up procedures. (D.34)		
		Reports of psychological and psychiatric examinations and assessment should be recorded on the school health record, should be interpreted to staff members, and should be discussed with pupil and parents in terms of capabilities. (D.35)
		Periodic appraisal of mental health needs and services for pupils should be made through analysis of student drop-out rates, case studies, and consultation case loads. (D.36)

There was a large difference on the criterion for participation of school personnel in follow-up procedures, although it was endorsed by both groups. Few commented on this criterion. One public health worker said, "The real problem is that the evaluation usually reaches a dead end in a file, the teacher never gets it, the one who is dealing with the child."

The criterion for the recording of psychological and psychiatric reports on the school health record was rejected by both groups. Over one-third of the respondents, almost two-thirds of whom were public health workers, commented. Most of these respondents mentioned the importance of the confidential nature of the school health record, but many did not feel that this was sufficient. Some suggested that only a note that the pupil had been seen should be recorded.

The criteria for interpretation of reports of psychological and psychiatric examinations were rejected by both groups, as were the criteria for periodic appraisal of mental health needs and services for pupils.

Cumulative Health Records

Controversy over the cumulative health records seems to be related to perceptions about whether this is a school record, a public health record, or both. Their confidentiality seems to have become the centre of argument.

The endorsement of the criteria for cumulative health records is shown in Chart 25.

CHART 25

THE ENDORSEMENT OF THE CRITERIA FOR CUMULATIVE SCHOOL HEALTH RECORDS ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Not Endorsed by Either Group
Parents should be encouraged to provide information about the health history of the child and family during the school registration conference or preschool medical examination, and following any subsequent significant illness. (D.37)		
	The cumulative health records should be filed in the school,	
and should accompany the pupil from grade to grade and from school to school, ...		with restrictions regarding the forwarding of certain confidential information. (D.38)
	Teachers should be encouraged to use the cumulative health records. (D.39)	
Teachers should have the opportunity to contribute signicicant information to the cumulative health records. (D.40)		

Three-quarters of these criteria for cumulative health records were endorsed by both groups.

The largest difference was on the filing of the cumulative health records in the school which was supported by the educators but rejected by the public health workers. About one-quarter of the respondents, over four-fifths of whom were public health workers, commented. Most of the public health workers expressed a conviction that if they were kept in the school they should be locked. Many preferred to keep them in the health department offices and take them to the school and back. The educators wanted them in the school. The danger of the loss of records left in the school was noted. One public health respondent said, "They should be in the health unit office until you have people in the school with training."

There was a large difference on the criterion for the teacher's use of the cumulative health records. This was endorsed by the educators but rejected by the public health workers. Almost one-third of the respondents, over four-fifths of whom were public health workers, commented. The educators expressed the opinion that they needed at least a synopsis. Many of the public health workers felt that the teacher-nurse conferences could serve to exchange information needed by the teacher. One educator said that the teacher should do the recording, not a clerk. A public health worker said that the teachers should be required to add pertinent information to the cumulative

health records. An educator said:

> Administrative measures should not restrict the use of these records to the health personnel. Can this be changed?

Counseling and Follow-up Services

While most public health workers perceive themselves as health counselors, the introduction of other personnel, such as the visiting teacher and the school social worker, for counseling students with emotional and social problems, raises the question of whether the professional health worker, unless he is a psychiatrist or a psychologist, is seen as a counselor on more than physical health problems.

Borland has replicated the follow-up study by Gabrielson, Levin and Ellison of New Haven in Scarborough, Ontario.[1] While many of the findings were similar, Borland reported some differences: that social class seemed to distinguish between families seeking professional help and those which did not; that almost twice as high a percentage of the Scaroborough families felt the school should be responsible for first aid; that only 56 per cent of children referred for dental care in Scarborough received it as compared with 75 per cent in New Haven.

The endorsement of the criteria for counseling and follow-up is shown in Chart 26.

---

[1]M. Joan Borland and Rheta Rosen, A Study of the Health Referral Process in the Scarborough Schools, Unpublished report of study, March 1966, (Mimeographed), n.p.

[2]Ira W. Gabrielson, Lowell S. Levin and Margaret D. Ellison, "Factors Affecting School Follow-Up," American Journal of Public Health, LVII (January, 1967), pp. 48-59.

CHART 26

THE ENDORSEMENT OF THE CRITERIA FOR COUNSELING AND FOLLOW-UP ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
Counseling and follow-up procedures should involve pupils, parents, ... and teachers and administrators. (D.41)	family physicians and dentists,	
Counseling and follow-up procedures should focus on the significance of appraisal findings, the need for further examination and/or treatment, the utilization of community resources to assist in the provision of needed assessment and/or treatment, and helping the pupil to accept responsibility for his own health. (D.42)		
	There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. (D.43)	
There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family. (D.44)		
Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others, should be coordinated. (D.45)		
The school health physician and the public health nurse should initiate follow-up steps to ensure necessary medical care for all pupils whose parents are unable to provide it. (D.46)		
The correction of defects should be appraised on an individual basis, ...		. and through periodic surveys of correction rates. (D.47)

Over three-quarters of the criteria for counseling and follow-up were endorsed by both groups. Most of these were definitive and relational criteria.

There was a fairly large difference on the criterion for reporting to the pupil's physician and dentist regarding the appraisal findings. Over one-seventh of the respondents, almost three-quarters of whom were public health workers, commented. It was reported that this is being done in one large city on all dental work. Most of the respondents suggested that this be restricted to significant defects, or that it be done through the parent.

There was a very large difference on the criterion for the involvement of the family physicians and dentists in counseling and follow-up procedures. Less than one-tenth of the respondents commented. Most of them qualified this on the basis of need.

Another criterion on which there was a sizeable difference was that for the provision of counseling students, although it was endorsed by both groups. Less than one-tenth of the respondents commented. One educator said, " The counseling of students should be the concern of the classroom teacher with special tasks undertaken by the guidance department. Health services should be a "partner." It does not appear that the public health nurse was perceived as a health counselor by the educators.

While the criterion for provisions to counsel parents through

home visiting when indicated was endorsed by both groups, there was a difference in their levels of judgment. Few respondents commented, but one educator said that counseling could be done in less time-consuming ways.

Communicable Disease Prevention, Detection, and Control

Communicable disease prevention, detection and control have received as much attention as any other facet of the school health services, and perhaps more attention in some parts of Canada.

Canadian policies on immunization have been prepared by the Maternal and Child Health Section of the Canadian Public Health Association, and adopted by the Association.[1]

The endorsement of the criteria for communicable disease detection, prevention and control is shown in Chart 27.

Over two-thirds of the criteria for communicable disease prevention, detection and control were endorsed by both groups. These were definitive and relational.

---

[1] Maternal and Child Health Section, "A Brief on Immunization Policy for the Canadian Public Health Association," Canadian Journal of Public Health, LVI (February, 1965), pp. 83-97.

Canadian Public Health Association, "Policy Statement on Immunization," Canadian Journal of Public Health, LVI (February, 1965), p. 83.

CHART 27

THE ENDORSEMENT OF THE CRITERIA FOR COMMUNICABLE DISEASE PREVENTION, DETECTION, AND CONTROL ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only
The school should contribute to the prevention, detection, and control of communicable diseases through the application of policies and procedures determined jointly by the departments of health and departments of education, ...	and coordinated with those of appropriate voluntary health agencies,
and these policies and procedures should be interpreted to and understood by local physicians and parents. (D.48)	
The local health department should provide each school with a list of reportable communicable diseases, a list of non-reportable communicable diseases, copies of official regulations concerning isolation, quarantine and exclusion, .	and periodic reports of the prevalence and distribution of communicable diseases. (D.49)
	All school personnel should be instructed in the recognition of observable signs and symptoms of communicable diseases and the specific measures for their control. (D.50)
Levels of immunity against smallpox, diphtheria, tetanus, whooping cough, and poliomyelitis should be established in infancy and maintained in the preschool years so that the child enters school with protection against these diseases. (D.51)	
Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil. (D.52)	
	The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health. (D.53)
	Pupils should be readmitted to school after a reportable communicable disease only after official release from the local department of health. (D.54)
School personnel should encourage parents to keep pupils at home when genuinely ill. (D.55)	
The school should cooperate in the execution of specific public health regulations and recommendations for the control of diseases spread by insects and animals. (D.56)	
There should be a planned programme of tuberculosis prevention, detection, and control for all pupils and all school personnel. (D.57)	

The public health workers rejected the criterion for readmission after official release from the local department of health with a very large difference in judgments from those of the educators. Over one-third of the respondents, almost three-quarters of whom were public health workers, commented. One-half indicated that the family physician should be able to provide a release. Many of the public health workers said that the provision of such releases was a waste of time.

The public health workers rejected the criterion for the provision of periodic reports on the prevalence and distribution of communicable diseases. Less than one-fifth of the respondents commented, most of whom were public health workers. It was reported that this was being done in two large cities. A number of the respondents said that this was a good idea. Some felt that the public health nurses informed the teachers.

There was considerable difference in the judgments on the criterion for the instruction of school personnel in the recognition of observable signs and symptoms and the specific measures for their control. Almost one-fifth of the respondents, most of whom were public health workers, commented. There were some who felt that this should be included in teacher preparation. Others felt that it should be provided in in-service education. Some of the public health workers were afraid that this would lead to teacher diagnosis.

First Aid and Emergency Care

The plans for the provision of first aid and emergency care are receiving more attention outside the urban areas as the school administrators recognize the problems involved in the bussing of students from longer distances. Even in urban areas, the employment of both parents may necessitate delays. In some urban areas, the writer was told that the police are asked to take over if the parents cannot be located promptly. In some rural areas locating the police might be as difficult as locating the parents, and the transportation problem might be time-consuming and awkward if the student should be moved to a hospital and his home is some twenty to thirty miles in the opposite direction from the nearest hospital.

This planning cannot be entirely student-oriented. In a recent explosion in a school near Toronto of two cleaners who were seriously burned, one died.[1]

The endorsement of the criteria for plans for first aid and emergency care is shown in Chart 28.

Over three-quarters of the criteria for plans for first aid and emergency care were endorsed by both groups. Most of these were definitive criteria.

---

[1] "Cleaner Hurt in School Blast Dies," The Telegram, (Toronto) October 31, 1966, p. 45.

CHART 28

THE ENDORSEMENT OF THE CRITERIA FOR PLANNING FOR FIRST AID AND EMERGENCY CARE ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Public Health Workers Only	Not Endorsed by Either Group
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of, and periodic assessment of, a planned programme for first aid and emergency care. (D.58) The medical officer of health should provide a list of first aid supplies, advice regarding the location and upkeep of first aid kits, and a guide for first aid and emergency procedures. (D.59) The provision of emergency care and first aid for students and staff members should be primarily the responsibility of the school administration with the assistance of professional health personnel, if in the school, at the time of a serious emergency. (D.60) School personnel should limit their first aid and emergency measures to those defined in the above-mentioned guide. (D.61)		
	One person in each school should be responsible for first aid and emergency plans.(D.62)	
		All teachers should have first aid preparation equivalent to the Red Cross Course or St. John Ambulance Course. (D.63)
The first aid and emergency procedures should be interpreted to parents, ...	and to local physicians and dentists (regarding dental emergencies). (D.64)	
Detailed information should be obtained from all staff members, and from parents for all pupils at the beginning of each school year to facilitate locating the parent or guardian, and using the physician and hospital of choice in an emergency. (D.65) The school plant should be planned and specific procedures established for the protection of pupils in the event of likely, or possible, natural types of disaster such as fire, flood, tornado, or blizzard, striking the school or community. (D.66) Each school should have an accident record form to be completed on every accident, and reviewed periodically in terms of accident prevention measures. (D.67)		

The largest difference was on the criterion for one person in each school to be responsible for first aid and emergency plans. Almost one-quarter of the respondents, more than one-half of whom were educators, commented. About one-half of these respondents upheld the desirability of this criterion, but about two-fifths said that there should be more than one person. One respondent said that this should be a part of the teacher preparation program.

Another large difference was evident on the criterion for the interpretation of first aid and emergency procedures to local physicians and dentists (regarding dental emergencies). Few persons commented.

Both groups rejected the criterion for all teachers having first aid preparation but the public health workers were more supportive than the educators. About one-tenth of the respondents commented. Several supported the idea that all teachers should have some preparation but qualified this to the extent that everyone should have it. Some said that not all teachers were "emotionally equipped" to handle an emergency.

Facilities for School Health Services

The facilities for school health services have been inadequate in many schools, even relatively new schools, if the provincial department of education did not provide grants towards the provision of

these facilities. Unless specifications were included in the manual for architects often these facilities have had to be converted.

The endorsement of the two criteria for facilities for school health services is shown in Chart 29.

CHART 29

THE ENDORSEMENT OF THE CRITERIA FOR FACILITIES FOR SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

Endorsed by Both Groups
The school health room, or suite, should provide adequate space and facilities to administer the school health services carried on within the school.
This room, or suite, should be located where it can be supervised by a member of the school staff when not under the supervision of a member of the professional health staff. (D.69)

Some of the respondents commented on the difficulty of obtaining a suitable room. One said that no health department approval should be given to the plans for a large school without inclusion of a proper health room. Several pointed out that in the smaller schools the important features were space and facilities, that the room might serve other purposes at other times.

Some respondents suggested that the health services' room, or suite, should be adjacent to the principal's office. Another said that, in one new school, a personnel area was designated which included the school office, the health services and the guidance center, and this facilitated liaison and exchange of information and records.

Provisions for Exceptional (Handicapped) Pupils

In Canada, voluntary health agencies have played a major role in the provisions for exceptional (handicapped) pupils, especially the Crippled Childrens' Societies. These have worked closely with the official health departments.

Involvement of health departments in the United States and in Britain are arousing attention to the responsibilities of the provincial and local departments of health. Getting urged the establishment of operating committees between the agencies supplying health services to the handicapped child as an outcome of his survey.[1]

The endorsement of the criteria for the provision for exceptional (handicapped) children is shown in Chart 30.

Less than one-quarter of the criteria for provisions for exceptional pupils were endorsed by both groups. These were related primarily to planning.

There was a high difference on only one criterion, that for the school health program being more comprehensive than for other pupils. About one-tenth of the respondents commented. Most of their comments were to the effect that this should be related to the needs of the individual pupil.

---

[1] Getting, p. 186.

CHART 30

THE ENDORSEMENT OF THE CRITERIA FOR PROVISIONS FOR EXCEPTIONAL (HANDICAPPED) CHILDREN ACCORDING TO PROFESSION

Endorsed by Both Groups	Endorsed by Educators Only	Endrosed by Public Health Workers Only	Not Endorsed by Either Group
The local medical officer of health, or the school health physician, should provide medical consultation to the educational administrator and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils. (D.70)			The school health programme for exceptional pupils should be more comprehensive than for other pupils, and
	should pay particular attention to their emotional and social adjustment. (D.71)		
There should be appropriate adaptations of the school programme, ...		and the teaching facilities to meet the health needs of some of the exceptional pupils. (D.72)	the school building,
			There should be provisions for exceptional pupils in the regular classroom, special classes, and special schools. (D.73)

Of the 149 criteria for school health services, .63 were endorsed by both groups, .57 were endorsed by the educators, and .75 were endorsed by the public health workers. The proportions endorsed within each group of criteria are shown in Table 35.

The proportions ranged from .22 in the group for provisions for exceptional pupils to .81 in the group for the nature of school health services (and to 1.00 in the pair of criteria for the facilities for school health services). Over three-fifths of the criteria were endorsed in over one-half of the groups.

RELATIVE AGREEMENTS BETWEEN THE RESPONDENTS ON THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES

Analysis According to Profession

The measures of agreement according to profession are summarized in Table 36.

The average of the average differences was moderate.

The public health workers made as high or higher judgments on all of these groups of criteria except that for cumulative health records as the educators.

The relative agreements are summarized in Chart 31.

TABLE 35

THE PROPORTION OF CRITERIA FOR SCHOOL HEALTH SERVICES ENDORSED BY BOTH PROFESSIONAL GROUPS

Group of Criteria	Number of Criteria in the Group	Proportion of Criteria Endorsed by Both Groups
The Nature of Health Services	16	.81
Planning Health Services	7	.43
Health Service Personnel	6	.33
Health Appraisals	9	.56
Screening Tests [1]	15	.80
Medical Examinations	8	.38
Dental Health Services	8	.62
Mental Health Services	16	.50
Cumulative Health Records	8	.75
Counseling and Follow-Up	14	.79
Communicable Disease Control	17	.71
First Aid and Emergency Care	14	.79
Facilities for Health Services	2	1.00
Exceptional (Handicapped) Pupils	9	.22

[1] These are related groups rather than sub-groups of the general health appraisal group.

TABLE 36

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

	Number of Criteria	Proportion of Criteria Endorsed by Both Groups	Profession Av.Diff. Pct.	Profession Tau	Relative Agreement	Proportion of Criteria Judged Higher by One Group
Nature of Health Services	16	.81	6	*	moderate	.62 (health)
Planning of Health Services	7	.43	14	.43	moderate(dl)[1]	.80 (health)
Health Service Personnel	6	.33	7	*	moderate	.83 (health)
Health Appraisals	12	.67	7	*	moderate	.58 (health)
Screening Tests[2]	15	.80	10	.52	moderate(dl)	1.00 (health)
Medical Examinations	8	.38	11	.75	high (dl)	.83 (health)
Dental Health Services	8	.62	8	.29	low (mdl)[3]	.75 (health)
Mental Health Services	16	.50	7	*	moderate	.88 (health)
Cumulative Health Records	9	.56	11	.54	moderate(dl)	.56 (educ.)
Counseling and Follow-Up	17	.76	6	*	moderate	.73 (health)
Communicable Disease Control	20	.75	9	.46	moderate(mdl)	.50
First Aid and Emergency Care	15	.80	10	.52	moderate(dl)	.80 (health)
Facilities for Health Services	2	1.00	2	*	high	1.00 (educ.)
Exceptional Children	12	.42	5	*	high	.67 (health)
Average of Average Differences			8			

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]Different level.

[2]These are related groups rather than sub-groups of the general group for health appraisals.

[3]Moderately different level.

CHART 31

THE COMPARISON OF THE RELATIVE AGREEMENTS ON THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION

Level of Agreement \ Relative Agreement	Low	Moderate	High
Similar		Nature of Health Services Health Service Personnel Health Appraisals Mental Health Services Counseling and Follow-Up	Facilities for Health Services Exceptional Children
Moderately Different	Dental Health Services	Communicable Disease Control	
Different		Planning of Health Services Screening Tests Cumulative Health Records First Air and Emergency Care	Medical Examinations

There were relatively high agreements on three of these groups of criteria, moderate agreements on ten, and low agreement on one group. In seven of these groups the judgments were on similar levels, in two on moderately different levels, and in five on different levels.

Analysis According to Type of Preparation

The measures of agreement according to the type of preparation are shown are shown in Table 37.

Some similarities are evident in the agreements on these groups of criteria. The averages of the average differences were moderate and the same.

The comparison of the measures of agreement according to profession and according to the education and health preparation groups is shown in Table 38.

The similarity in the relative agreements was very close, and the averages of the average differences were close but there were differences on some groups such as medical examinations and communicable disease control.

TABLE 37

THE COMPARISON OF THE MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO TYPE OF PREPARATION

Group of Criteria	Length of Experience: Dual and Education Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by one Group	Dual and Health Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by one Group	Education and Health Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by one Group
Nature of Health Services	8	.50	.86 (educ.)	12	.40	.81(health)	5	*	.56(health)
Planning of Health Services	6	*	.67 (educ.)	12	.72	.86(health)	15	.43	.67(health)
Health Service Personnel	10	.74	.67 (educ.)	11	.50	.67(health)	8	.55	.83(health)
Health Appraisals	8	.39	.50 (dual)	7	*	.67(health)	8	.56	.50
Screening Tests	7	*	.57 (dual)	10	.53	.93(health)	11	.61	.93(health)
Medical Examinations	8	.59	.75 (educ.)	14	.71	.88(health)	14	.37	.63(health)
Dental Health Services	10	.57	.75 (dual)	5	*	.63(dual)	10	.34	.88(health)
Mental Health Services	10	.36	.73 (educ.)	10	.50	.88(health)	8	.64	.75(health)
Cumulative Health Records	10	.67	.89 (educ.)	5	*	.75(health)	10	.67	.67(educ.)
Counseling and Follow-up	9	.38	.69 (educ.)	10	.25	.88(health)	7	*	.60(health)
Communicable Disease Control	9	.31	.67 (educ.)	8	.44	.58(health)	10	.25	.60(health)
First Aid and Emergency Care	6	*	.64 (dual)	9	.26	.79(health)	11	.34	.73(health)
Facilities for Health Services	17	1.00	1.00 (educ.)	11	1.00	1.00(health)	1	*	1.00(educ.)
Exceptional Children	9	.61	.50	7	*	.64(health)	5	*	.67(health)
Average of Average Differences	9			9			9		

*The value is not meaningful because the average difference is not large enough to make the ranking relatively stable.

TABLE 38

COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO PROFESSION AND ACCORDING TO THE HEALTH AND EDUCATION PREPARATION GROUPS

Group of Criteria	Profession		Health and Education Preparation Groups	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Nature of Health Services	6	*	5	*
Planning of Health Services	14	.43	15	.43
Health Service Personnel	7	*	8	.55
Health Appraisals	7	*	8	.56
Screening Tests[1]	10	.52	11	.61
Medical Examinations	11	.75	14	.37
Dental Health Services	8	.29	10	.34
Mental Health Services	7	*	8	.64
Cumulative Health Records	11	.54	10	.67
Counseling and Follow-Up	6	*	7	*
Communicable Disease Control	9	.46	10	.25
First Air and Emergency Care	10	.52	11	.34
Facilities for Health Services	2	*	1	*
Exceptional Children	5	*	5	*
Average of Average Differences	8		9	

*This value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]These are related groups rather than sub-groups of the general health appraisal groups so they are counted in determining the averages of the average difference.

The education preparation group made as high or higher judgments than the dual preparation group on all of the groups of criteria except those for: screening tests, dental health services, and first aid and emergency care, the service-oriented groups of criteria. The health preparation group judged higher than the dual preparation group on all of the groups of criteria except that for dental health services. The health preparation group made as high or higher judgments than the education preparation group on all of the groups of criteria except that for cumulative health records, and that for facilities for health services.

The criteria judged at least 10 per cent higher by the dual preparation group are shown in Appendix J.

In summary, although the relative agreements were very close, the health preparation group made more liberal judgments than either the education or dual preparation groups.

Analysis According to Length of Experience

The measures of agreement according to length of experience are shown in Table 39.

The relative agreements between the 10-19-year and the 20-year-and more experience groups were much closer than those between the under-10-year and the 10-19-year experience groups, or those between the under-10-year and the 20-year-and-more experience groups.

TABLE 39

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO LENGTH OF EXPERIENCE

Group of Criteria	Length of Experience: Under 10 Yrs. and 10-19 Yrs. Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group	Under 10 Yrs. and 20 Yrs. and More Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group	10-19 Yrs. and 20 Yrs. and More Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by One Group
Nature of Health Services	9	.63	.93 (10 yr.)[1]	8	.55	.80 (10 Yr.)	5	*	.56 (10-19 yr.[2])
Planning of Health Services	13	.95	1.00 (10 yr.)	10	.93	.86 (10 yr.)	5	*	.86 (20 yr.)[3]
Health Service Personnel	17	.75	1.00 (10 yr.)	12	.75	.83 (10 yr.)	5	*	.67 (20 yr.)
Health Appraisals	10	.61	.92 (10 yr.)	10	.64	.92 (10 yr.)	4	*	.55 (10-19 yr.)
Screening Tests[4]	9	.62	.87 (10 yr.)	6	*	.73 (10 yr.)	7	*	.79 (20 yr.)
Medical Examinations	7	*	.88 (10 yr.)	10	.73	.63 (10 yr.)	6	*	.63 (20 yr.)
Dental Health Services	8	.59	.75 (10 yr.)	12	.41	.75 (10 yr.)	7	*	.75 (10-19 yr.)
Cumulative Health Records	13	.83	.89 (10 yr.)	12	.69	.62 (10 yr.)	9	.69	.62 (20 yr.)
Counseling and Follow-up	10	.21	.82 (10 yr.)	10	.32	.82 (10 yr.)	5	*	.60 (20 yr.)
Communicable Disease Control	10	.38	.65 (10 yr.)	7	*	.58 (10 yr.)	6	*	.58 (20 yr.)
First Aid and Emergency Care	10	.28	.53 (10 yr.)	7	*	.73 (10 yr.)	7	*	.73 (10-19 yr.)
Facilities for Health Services	0	*	.00	6	*	.50	6	*	.50
Exceptional Children	14	.55	.64 (10-19 yr.)	16	.50	.64 (20 yr.)	5	*	.73 (10-19 yr.)
Average of Average Differences	11			10			6		

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.
[1]Under 10 yrs.
[2]20 Yrs. and more
[3]10-19 Yrs.
[4]These are related groups rather than sub-groups.

The under-10-year experience group made as high or higher judgments than the 10-19-year experience groups on all of the groups of criteria except that for provisions for exceptional children. The under-10-year experience group made as high or higher judgments than the 20-year-and-more experience group except on the group of criteria for provisions for exceptional children. The 20-year-and-more experience group made as high or higher judgments than the 10-19-year experience group except for those for: the nature of health services, health appraisals (general), dental health services, and exceptional children.

The criteria that were judged at least 10 per cent higher by the under-10-year experience group are shown in Appendix J.

The under-10-year experience group made higher judgments on most of these groups of criteria than either the 10-19-year or the 20-year-and-more experience groups. The 10-19-year and the 20-year-and-more experience groups made very similar judgments.

Analysis According to Range of Involvement

The measures of agreement between the involvement groups are shown in Table 40.

There were moderate to high agreements between the involvement groups on all of these groups of criteria.

TABLE 40

COMPARISON OF MEASURES OF AGREEMENT ON GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES ACCORDING TO THE RANGE OF INVOLVEMENT

Group of Criteria	Involvement Group I and Group II Av. Diff. Pct.	Tau	Proportion of Criteria Judged Higher by one Group
Nature of Health Services	6	*	.79 (Gr.I)
Planning of Health Services	3	*	.57 (Gr.II)
Health Service Personnel	7	*	.67 (Gr.II)
Health Appraisals	8	.78	.75 (Gr.I)
Screening Tests	4	*	.60 (Gr.I)
Medical Examinations	5	*	.83 (Gr.II)
Dental Health Services	8	.42	.63 (Gr.I)
Mental Health Services	4	*	.77 (Gr.II)
Cumulative Health Records	7	*	.71 (Gr.II)
Counseling and Follow-up	5	*	.50 (Gr.II)
Communicable Disease Control	5	*	.55 (Gr.I)
First Aid and Emergency Care	6	*	.79 (Gr.I)
Facilities for Health Services	2	*	.50
Exceptional Pupils	8	.84	.91 (Gr.I)
Average of Average Differences	6		

*The value is not meaningful because the average difference is not large enough to make the rankings stable.

[1]These are related groups rather than sub-groups of the general health appraisal group so they are counted in determining the average of the average differences.

Group I made as high or higher judgments on all of the groups of criteria except that those for: the planning of school health services, health service personnel, medical examinations, mental health services, and cumulative health records.

The criteria judged at least 10 per cent higher by Group I than by Group II are shown in Appendix J.

Although Group I tended to make higher judgments on more than one-half of the groups of criteria for health services, the number of criteria on which they judged at least 10 per cent higher than Group II suggests that the differences were not very large, for the most part.

SUMMARY AND CONCLUSIONS

Of the 149 criteria for school health services, only .63 were endorsed by both groups, while .57 were endorsed by the educators and .75 by the public health workers. The range of proportions endorsed by both groups was from .22 on the group of criteria for provisions for exceptional pupils to .81 on the group for the nature of school health services (and 1.00 for the pair of criteria for facilities for health services). In one-half of the groups of criteria for school health services more than .60 of the criteria were endorsed by both professional groups.

The measures of agreement according to profession, type of preparation, length of experience, and range of involvement are

summarized in Appendix K.

There were relatively high agreements, sometimes, on different levels, on the following groups of criteria between the respondent groups indicated in parentheses:

1) Medical examinations (professional groups, dual and health preparation groups).
2) Facilities for health services (professional groups, dual and education preparation groups, dual and health preparation groups, education and health preparation groups, under-10-year and 10-19-year experience groups, and involvement groups).
3) Provisions for exceptional (handicapped) pupils (professional groups, education and health preparation groups, 10-19-year and 20-year-and-more experience groups, and involvement groups).
4) Cumulative health records (dual and education preparation groups, dual and health preparation groups, education and health preparation groups, under-10-year and 10-19-year experience groups, under 10-year and 20-year-and-more experience groups, and 10-19-year and 20-year-and-more experience groups).
5) Planning health services (dual and education preparation groups, under-10-year and 10-19-year experience groups, under 10-year and 20-year-and-more experience groups, and 10-19-year and 20-year-and-more experience groups).

6) Nature of health services (10-19-year and 20-year-and-more experience groups).

7) Health appraisals (general) (10-19-year and 20-year-and-more experience groups).

8) Mental health services (10-19-year and 20-year-and-more experience groups, and involvement groups).

9) Counseling and follow-up (10-19-year and 20-year-and-more experience groups, and involvement groups).

10) Communicable disease control (involvement groups).

There were moderate agreements between the respondent groups on all of the other groups of criteria except the following between the groups of respondents indicated in parentheses:

1) Dental health services (professional groups).

2) Communicable disease control (dual and education preparation groups, and education and health preparation groups).

3) Counseling and follow-up (dual and health preparation groups, under-10-year and 10-19-year experience groups, and under-10-year and 20-year-and-more experience groups).

4) First aid and emergency care (dual and health preparation groups, and 10-19-year experience groups).

The proportions of criteria judged higher by one group are summarized in Appendix J.

The public health workers made as high or higher judgments than the educators on all of the groups of criteria except that for cumulative health records, and that for facilities for health services. The education preparation group made as high or higher judgments than the dual preparation group on all of the groups of criteria except those for: screening tests, dental health services, and first aid and emergency care. The health preparation group made higher judgments on all of the groups of criteria except that for dental health services. The health preparation group made as high or higher judgments than the education preparation group on all of the groups of criteria except that for cumulative health records, and that for facilities for school health services. The under-10-year experience group made as high or higher judgments than the 10-19-year experience group on all of the groups of criteria except that for provisions for exceptional pupils. The under-10-year experience group made as high or higher judgments than the 20-year-and-more experience group except on the group of criteria for exceptional pupils. The 20-year-and-more experience group made as high or higher judgments than the 10-19-year experience group on all of the groups of criteria except those for: the nature of health services, health appraisals (general), dental health services, first aid and emergency care, and provisions for exceptional pupils. Group I made as high or higher judgments than Group II on the groups of criteria for: the nature of health

services, health appraisals (general), screening tests, dental health services, counseling and follow-up, communicable disease control, first aid and emergency care, facilities for health services, and provisions for exceptional pupils.

The averages of the average differences were moderate and the same for the 10-19-year and the 20-year-and-more experience groups, and the involvement groups, slightly higher for the professional groups, slightly higher still and the same for all of the preparation groups, high for the under-10-year and the 20-year-and-more experience groups, and still a little higher for the under-10-year and the 10-19-year experience groups.

Conclusions

Both professional groups endorsed .63 of the criteria for school health services. The educators endorsed .57 and the public health workers endorsed .75 of these criteria.

In general, the agreements were moderate to high, and very similar on the groups of criteria for health services but there were some differences which suggest:

1) In general, the public health workers made more liberal judgments than the educators.
2) In general, the health preparation group made more liberal judgments than either the education or the dual preparation groups.

3) In general, the dual preparation group made more conservative judgments than the education preparation or the health preparation group on the groups of criteria for the planning of, and personnel for, health services, but made slightly more liberal judgments on the service-oriented groups of criteria.

4) In general, the under-10-year experience group made more liberal judgments than the 10-19-year or the 20-year-and-more experience groups.

5) In general, the 20-year-and-more experience group made as liberal or more liberal judgments than the 10-19-year experience group.

6) In general, Group I made as liberal or more liberal judgments than Group II except on the groups of criteria for planning, personnel, and some of the groups for health appraisal.

The relatively high agreements on some groups of criteria, especially those for: medical examinations, provisions for exceptional children, and facilities for health services, even though the proportions of criteria endorsed were not high in two of these groups, provide a basis for planning.

The relatively low agreements, between the professional groups on the group of criteria for dental health services suggests that this may be an area in need of further investigation.

CHAPTER IX

CONCLUSIONS AND IMPLICATIONS

The primary purpose of this study was to initiate the development of a self-appraisal schedule for the evaluation of Canadian school health programmes through a synthesis of the concepts and constructs in authoritative Canadian, British and American literature with the judgments of selected leaders in education and public health on their applicability. A secondary purpose was to determine whether the type of preparation, length of experience, and range of involvement, of the respondents were influential in the extent of the relative agreements in their judgments on applicability.

The literature review method was used in the formulation of the guiding principles and criteria. These were used in an interview schedule-questionnaire instrument to obtain the judgments of the population of those leaders in Canadian education and public health who met certain criteria.

The data were collected by interview and/or mailed questionnaire. Each respondent was asked to judge each guiding principle and each criterion as "definitely applicable," "possibly applicable," or "definitely not applicable" for use in the planning, development and

maintenance of school health programs.

The data were analyzed to show the endorsement of the guiding principles and criteria by at least 75 per cent of the educators and of the public health workers, and to show the relative agreements between the respondents on the basis of profession, type of preparation, length of experience, and range of involvement.

THE MAJOR FINDINGS

Endorsement

All 8 guiding principles were endorsed by at least 75 per cent of both of the professional groups of respondents.

The proportions of the 335 criteria endorsed by both professional groups, by the educators, and by the public health workers, are shown in Table 41.

The range of the proportions of criteria endorsed by both professional groups was from .22 for the group of criteria for provisions for exceptional (handicapped) pupils to 1.00 for the group of criteria for safety and accident prevention within the buildings and grounds (and also for the pair of criteria for facilities for health services). On 10 of the 26 groups of criteria at least three-quarters of the criteria within each group were endorsed by both professional groups.

TABLE 41

PROPORTIONS OF CRITERIA ENDORSED AT THE 75 PER CENT LEVEL

Group of Criteria	No. of Criteria in Group	Endorsed by Both Groups		Endorsed by Educators		Endorsed by Public Health Workers	
		No.	Prop.	No.	Prop.	No.	Prop.
Nature and Organization	18	8	.44	9	.50	11	.61
Health of School Personnel	6	2	.33	3	.50	2	.33
Emotional and Social Environment	16	6	.38	14	.88	7	.44
Physical Environment	14	12	.86	12	.86	13	.93
Safety and Accident Prevention Within Buildings and Grounds	12	12	1.00	12	1.00	12	1.00
Safety and Accident Prevention on Way to and from School	8	7	.88	7	.88	7	.88
School Lunch Facilities and Services	22	18	.82	18	.82	18	.82
Planning and Conduct of Health Instruction	21	11	.52	11	.52	17	.76
Personnel for Health Instruction	12	6	.50	6	.50	7	.58
Topical Content Areas	28	20	.71	21	.75	24	.86
Professional Preparation	9	4	.44	4	.44	8	.89
Continuing Education	10	3	.30	3	.30	4	.40
Nature of Health Services	16	13	.81	13	.81	13	.81
Planning of Health Services	7	3	.43	3	.43	5	.71
Health Service Personnel	6	2	.33	3	.50	3	.50
Health Appraisals	9	5	.56	7	.78	6	.56
Screening Tests	15	12	.80	12	.80	13	.87
Medical Examinations	8	3	.38	3	.38	6	.75
Dental Health Services	8	5	.62	5	.62	7	.88
Mental Health Services	16	8	.50	8	.50	10	.63
Cumulative Records	8	5	.75	7	.88	5	.62
Counseling and Follow-Up	14	11	.79	11	.79	13	.93
Communicable Disease Control	17	12	.71	17	1.00	12	.71
First Aid and Emergency Care	14	11	.79	11	.79	13	.93
Facilities for Health Services	2	2	1.00	2	1.00	2	1.00
Exceptional Pupils	9	2	.22	3	.33	3	.33

The range of endorsement by the educators was from .30 for the group of criteria for continuing education to 1.00 for the group for safety and accident prevention within the buildings and grounds, and for the group for communicable disease control (as well as for the pair of criteria for facilities for health services). On 14 of the 26 groups of criteria at least three-quarters of the criteria within each group were endorsed by the educators.

The range of endorsement by the public health workers was from .33 for the groups of criteria for the health of school personnel, and for provisions for exceptional (handicapped) pupils, to 1.00 for the group for safety and accident prevention within the buildings and grounds (and for the pair of criteria for facilities for health services). On 14 of the 26 groups of criteria at least three-quarters of the criteria within each group were endorsed by the public health workers.

The rank order of the groups according to the proportions of the criteria endorsed by both professional groups is shown in Table 42.

TABLE 42

RANK ORDER OF THE GROUPS OF CRITERIA ACCORDING TO THE PROPORTION ENDORSED BY BOTH PROFESSIONAL GROUPS

	Proportion Endorsed by Both Groups	Rank Order
Safety and Accident Prevention Within Buildings and Grounds	1.00	1.5
Facilities for Health Services	1.00	1.5
Safety and Accident Prevention on Way to and from School	.88	3
Physical Environment	.86	4
School Lunch Facilities and Services	.82	5
Nature of Health Services	.81	6
Screening Tests	.80	7
Counseling and Follow-Up Services	.79	8.5
First Aid and Emergency Care	.79	8.5
Cumulative Health Records	.75	10
Communicable Disease Control	.71	11.5
Topical Content Areas	.71	11.5
Dental Health Services	.62	13
Health Appraisals	.56	14
Planning and Conduct of Health Instruction	.52	15
Personnel for Health Instruction	.50	16.5
Mental Health Services	.50	16.5
Nature and Organization of School Health Program	.44	18.5
Professional Preparation	.44	18.5
Planning of Health Services	.43	20
Emotional and Social Environment	.38	21.5
Medical Examinations	.38	21.5
Health Service Personnel	.33	23.5
Health of School Personnel	.33	23.5
Continuing Education	.30	25
Exceptional (Handicapped) Pupils	.22	26

There were no groups among those in which three-quarters of the criteria were endorsed by both professional groups that were primarily criteria for health education, six of these groups contained criteria for health services, and four contained criteria for healthful school living. In the groups in which less than one-half of the criteria were endorsed by both professional groups were those for the nature and organization of the school health program, two groups for healthful school living (emotional and social environment, and health of school personnel), the groups for professional preparation and continuing education, and four groups for school health services (planning, medical examinations, personnel, and provisions for exceptional pupils).

The criteria were grouped according to the component parts of the school health program. The proportions of endorsement on this basis are shown in Table 43.

The range of endorsement on the component parts by both professional groups was from .44 to .65, by the educators from .50 to .75, and by the public health workers from .61 to .75.

TABLE 43

PROPORTIONS OF THE CRITERIA FOR THE COMPONENT PARTS OF THE SCHOOL HEALTH PROGRAM ENDORSED BY BOTH PROFESSIONAL GROUPS, BY THE EDUCATORS ONLY, AND BY THE PUBLIC HEALTH WORKERS ONLY

Component Part	No. of Criteria	Endorsed by Both Groups		Endorsed by Educators		Endorsed by Health Workers	
		No.	Prop.	No.	Prop.	No.	Prop.
Nature and Organization (Part A)	18	8	.44	9	.50	11	.61
Healthful School Living (Part B)	88	57	.65	66	.75	59	.67
Health Education (Part C)	80	44	.55	45	.56	60	.75
Health Services (Part D)	149	94	.63	105	.70	111	.74
Total	335	203	.61	225	.67	241	.72

The proportions of endorsement of the criteria by both professional groups according to the component parts of the school health program was slightly higher for the criteria for healthful school living followed closely by health services, health education, and the nature and organization of the school health program. The proportion of endorsement by the educators followed the same order. The proportion of endorsement by the public health workers was highest for health education followed closely by health services, healthful school living, and the nature and organization of the school health program.

The greatest difference in the endorsement of criteria on these component parts by the professional groups was on the criteria for health education where the educators endorsed .56 and the public health workers endorsed .75. The public health workers endorsed more of the criteria for health education than did the educators.

The 203 of the 335 criteria that were endorsed at the 75 per cent level have already been shown in the endorsement charts, but are brought together in Appendix L.

Some of the criteria were rejected by both educators and public health workers while others were rejected by one group but not by the other.

The criteria endorsed by the educators but rejected by the public health workers are shown in Chart 32.

For the most part, these criteria seem to be criteria which the teacher might perceive as being advantageous for his effectiveness.

The criteria endorsed by the public health workers but rejected by the educators are shown in Chart 33.

These included criteria with implications for interdepartmental planning and organization, health instruction, professional preparation, the use of auxiliary personnel, and relationships with parents, with family physicians and with dentists.

CHART 32

THE CRITERIA ENDORSED BY THE EDUCATORS BUT REJECTED BY THE PUBLIC HEALTH WORKERS

The school health programme should be coordinated with the entire educational programme. (A.2.b)

The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide arrangements for all school personnel to receive appropriate immunizations offered in the school health services. (B.1.d)

Teachers should plan their teaching to permit mastery of subject matter by each pupil at his own rate, and to provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear. (B.5)

The pupil-teacher ratio should be small enough to permit individual attention to all pupils, and large enough for group activities. (B.7)

Policies should be adapted to the individual needs and achievements of pupils with regard to such matters as grade placement, grouping within the classroom, homework assignments, and reporting of pupil progress. (B.8)

A study of personality and adjustment should be considered as a topical content area in curriculum planning in relation to the needs and age-grade levels of the pupils. (C.14.n)

Specialized health personnel should be available on an adequate time basis related to the nature of the educational programme. (D.3.b)

Health appraisal procedures should include medical and dental examinations. (D.7.c)

The classroom teacher should participate in the health appraisals in order to more clearly understand the health needs of pupils in relation to their performance. (D.8)

The cumulative school health records should be filed in the school. (D.38.a)

Teachers should be encouraged to use the cumulative health records. (D.39)

The school should contribute to the prevention, detection, and control of communicable diseases through the application of policies and procedures coordinated with those of appropriate voluntary health agencies. (D.48.b)

The local health department should provide each school with ... and periodic reports on the prevalence and distribution of communicable diseases. (B.49.d)

All school personnel should be instructed in the recognition of observable signs and symptoms of communicable diseases and the specific measures for their control. (D.50)

The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health. (D.53)

Pupils should be readmitted to school after a reportable communicable disease only after official release from the local department of health. (D.54)

The school health programme for exceptional (handicapped) pupils should pay particular attention to their emotional and social adjustment. (D.71.c)

CHART 33

CRITERIA ENDORSED BY THE PUBLIC HEALTH WORKERS BUT REJECTED BY THE EDUCATORS

Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation at the provincial and local levels. (A.5)

School health policies and procedures should ... and define the responsibilities of personnel. (A.6.c)

Pupils should be released from class on the request of the parent to keep selected medical and dental appointments. (B.11)

The medical officer of health, and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation and safety on an annual basis. (B.14.a)

Health instruction should permeate the entire curriculum and life of the school. (C.1)

Curriculum planning should involve all individuals and groups likely to contribute to health instruction. (C.3)

Professional health personnel should assist school personnel in ... and in in-service education programmes. (C.7.e)

Systematically organized health instruction should be provided for all pupils in all grades. (C.9)

Health instruction should be correlated with ... social studies and driver education. (C.11. d and e)

Among proposed content areas for curriculum planning in relation to the needs and age-grade levels of the pupils should be: consumer health education: local and provincial health and welfare services and programmes; vocations and careers in the health sciences and applied fields; and national and international health problems and programmes. (C.14. b(iv), q and s)

There should be a planned programme for parent education and for community understanding of the school programme provided by the school and the local department of health. (C.19.b)

Specialized health personnel ... should meet, or surpass, the minimum professional qualifications recommended by the provincial department of health, and the minimum recommended qualifications of the Canadian Public Health Association. (C.20. c and d)

Comprehensive preparation in school health and health education should be required of all prospective teachers to meet the minimum licensing requirements of the provincial department of education. (C.21)

Special preparation for health teachers in junior high and senior high schools, in an undergraduate programme in physical and health education, or its equivalent, in the health sciences should include work in ... and in the physical sciences. (C.22.c)

Auxiliary personnel, such as the certified nursing assistant, the audiometric technician, and the clerk, should be employed under the direct supervision of qualified professional health personnel to release the professional worker from tasks not requiring professional competencies. (D.4)

Individual teacher-nurse conferences should be held regularly ... to discuss the teachers' health observations. (D.9.a)

In schools where each pupil has a number of different teachers every day, the homeroom teacher should be recognized as having responsibility for the daily health supervision and guidance of the pupils. (D.10)

The introduction of other screening tests should be discussed with the local medical and/or dental society. (D.18.a)

The physician who attends the pupil regularly should be encouraged to do the routine medical examinations of the pupil. (D.19)

A parent should be present at any medical examination of the young pupil whether in the school health services, physician's office, or clinic. (D.20)

There should be plans for parental counseling with regard to the older pupil who may not want the parent present during the medical examination if the findings suggest the need for follow-up procedures. (D.21)

If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries. (D.26)

School dental inspections should be utilized to ... and facilitate community planning to meet dental needs. (D.28.b)

Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include ... psychiatric examination and assessment and special class placement. (D.32. d and e)

Counselling and follow-up procedures should involve ... and family physicians and dentists. (D.41.c)

There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. (D.43)

One person in each school should be responsible for first aid and emergency plans. (D.62)

The first aid and emergency procedures should be interpreted to ... and local physicians and dentists (regarding dental emergencies). (D.64.b)

There should be appropriate adaptations of ... and the teaching facilities to meet the needs of some of the exceptional pupils. (D.72.c)

In summary, all of the guiding principles and 203 of the 335 criteria were endorsed at the 75 per cent level. The 22 criteria endorsed by the educators but not by the public health workers might be reconsidered by the public health workers. Similarly, the 38 criteria endorsed by the public health workers, but not by the educators, might be reconsidered first by the educators. The 72 criteria not endorsed by either group might be studied in terms of the need for their redefinition. Not all of the rejected criteria should be assumed to need redefinition. Some may be inappropriate for the Canadian school health program, but all should be reconsidered.

Relative Agreements in the "Definitely Applicable" Judgments of the Respondents

The relative agreement, or lack of agreement, is not related necessarily to the endorsement or rejection of the criteria. Although in most groups of criteria where there was low agreement there was not particularly high endorsement, in some of these groups there was not particularly low endorsement. There might be high agreement on the rejection of most of the criteria in a group.

The relative agreements on the groups of criteria according to profession are summarized in Chart 34.

CHART 34

THE COMPARISON OF THE RELATIVE AGREEMENTS ON THE GROUPS OF CRITERIA ACCORDING TO PROFESSION

Level of Agreement \ Relative Agreement	Low	Moderate	High
Similar		Interdepartmental Planning and Organization School Health Policies and Procedures Coordination with Other Community Agencies Appraisal and Evaluation Health of School Personnel Topical Content Areas Nature of Health Services Health Service Personnel Health Appraisals Mental Health Services Counseling and Follow-Up	Educational Nature of Program Health Needs, Interests, etc. Pupil Involvement Communications from Others Physical Environment Safety and Accident Prevention within Buildings and Grounds Safety and Accident Prevention on Way to and from School School Lunch Facilities and Services Personnel for Health Instruction Facilities for Health Services Exceptional Pupils
Moderately Different	School-Community Coordination Attention to Individual Differences Dental Health Services	Coordination with Official Public Health Programs Emotional and Social Environment Communicable Disease Control	Planning and Conduct of Health Instruction
Different	Coordination with Family Medical and Dental Supervision Communications with Others	Coordination with Parental Responsibility Communications to Others Continuing Education Planning of Health Services Screening Tests Cumulative Health Records First Air and Emergency Care	

There was relatively high agreement on 11 of the groups of criteria, moderate agreement on 11 of the groups of criteria, on a similar level, relatively high agreement on a moderately different level on 1 group, moderate agreement on a moderately different level on 3 groups, and low agreement on a moderately different level on 3 groups. There was moderate agreement on a different level on 7 groups, and low agreement on a different level on 3 groups of criteria.

If dual preparation made no difference the relative agreements according to profession and to the education and health preparation groups should be similar. These are compared in Chart 35.

While there were many similarities in the relative agreements according to the professional groups, and according to the education and health preparation groups, there were some differences from moderate to low and from a similar level to a moderately different or a different level, especially on some of the rather relational groups of criteria, some on services, and some on health education. Thus dual preparation seemed to make some difference in the judgments on some groups of criteria.

CHART 35

COMPARISON OF THE RELATIVE AGREEMENTS BETWEEN THE PROFESSIONAL GROUPS AND BETWEEN THE EDUCATION AND HEALTH PREPARATION GROUPS[1]

Relative Agreement / Level of Agreement	No Agreement	Low Agreement		Moderate Agreement		High Agreement	
	Preparation Groups	Professional Groups	Preparation Groups	Professional Groups	Preparation Groups	Professional Groups	Preparation Groups
Similar				Interdepartl. Planning Community Agencies Evaluation Policies Health of Personnel Health Appraisals Nature of Services Mental Health Counseling	Health Needs Interdepartl. Planning School-Community Health of Personnel Counseling	Educational Nature Health Needs Pupil Involvement Communications From Physical Environ. Safety Within Safety on Way School Lunch Instruct.Personnel Facilities for Services Exceptional Pupils	Educational Nature Pupil Involvement Communications From Physical Environ. Safety Within Safety on Way School Lunch Instruct.Personnel Nature of Services Facilities for Services Exceptional Pupils
Moderately Different		Indiv.Differences School-Community Dental Health	Policies	Public Health Emotional Environ. Service Personnel Comm. Disease Control	Community Agencies Service Personnel Health Appraisals Mental Health Public Health	Planning Instruct. Prof. Preparation	Planning Instruct.
Different	Indiv.Differences Family Medical Communications With	Family Medical Communications With	Comm. Disease Control	Parental Responsibility Communications To Continuing Educ. Dental Health Planning Services Screening Tests Cumulative Records First Aid	Parental Responsibility Communications To Continuing Educ. Evaluation Emotional Environ. Prof. Preparation Planning Services Screening Tests Cumulative Records First Aid Medical Examinations	Medical Examinations	

[1]The name of each group of criteria is abbreviated.

If the under-10-year experience group made no difference a comparison of the relative agreements between the under-10-year and the 10-19-year, and those between the 10-19-year and the 20-year-and-more experience groups should be very similar. These are shown in Chart 36.

There were higher agreements between the 10-19-year and the 20-year-and-more experience groups than between the under-10-year and the 10-19-year experience groups. Therefore, the under-10-year experience group judged somewhat differently from the 10-19-year and the 20-year-and-more experience groups.

A comparison of the relative agreements according to profession and according to range of involvement are shown in Chart 37.

All of the relative agreements between the involvement groups were moderate or high. While there were no appreciable differences between the agreements according to the professional groups and according to the involvement groups on less than one-half of the groups, there seemed to be slightly closer agreements on most of the other groups of criteria by the involvement groups. However, the differences are so small that it does not seem that, in general, Group I, the multiple involvement group, judged as differently as either the under-10-year experience group or the dual preparation group.

CHART 36

COMPARISON OF THE RELATIVE AGREEMENTS BETWEEN THE UNDER-10-YEAR AND THE 10-19-YEAR EXPERIENCE GROUPS WITH THOSE BETWEEN THE 10-19-YEAR AND THE 20-YEAR-AND-MORE EXPERIENCE GROUPS[1]

Relative Agreements / Level of Agreement	Low Agreement: Under-10-Year and 10-19-Year Groups	Low Agreement: 10-19-Year and 20-Year-and-More Groups	Moderate Agreement: Under-10-Year and 10-19-Year Groups	Moderate Agreement: 10-19-Year and 20-Year-and-More Groups	High Agreement: Under-10-Year and 10-19-Year Groups	High Agreement: 10-19-Year and 20-Year-and-More Groups
Similar			Pupil Involvement Emotional Environ. Medical Examination Policies Parental School Lunch Planning Instructions Content Areas Continuing Education	Pupil Involvement Emotional Environ. Medical Examination First Aid Educational Nature Comm. Diseases Control Communications To Facilities for Services Family Medical Communications With Health of Personnel Dental Health Screening Tests Community Agencies	Physical Environ. Safety Within Safety On Way Facilities for Services	Physical Environ. Safety Within Safety On Way Policies School-Community Health Needs Individual Differences Parental Communications From Evaluation Facilities for Services Planning Instructions Counseling Exceptional Pupils School Lunch Instruct. Personnel Content Areas Nature of Services Planning Services Service Personnel Health Appraisals Mental Health Health of Personnel
Moderately Different			Educational Nature Community Agencies Indiv. Differences Communications To Instruct. Personnel Nature of Services Screening Tests Dental Health	Public Health Prof. Preparation	Prof. Preparation	Interdepartl. Planning Cumulative Records
Different	School-Community Family Medical Care Counseling First Aid		Public Health Community Agencies Health Needs Communications With Evaluation Health Appraisals Mental Health Comm. Diseases Control Exceptional Pupils Communications From Interdeptl. Planning		Health of Personnel Service Personnel Cumulative Records Planning Services	

[1] The name of each group of criteria is abbreviated.

CHART 37

COMPARISON OF THE RELATIVE AGREEMENTS BETWEEN THE PROFESSIONAL GROUPS WITH THOSE BETWEEN THE INVOLVEMENT GROUPS[1]

Relative Agreements / Level of Agreements	Low Agreement		Moderate Agreement		High Agreement	
	Professional Groups	Involvement Groups	Professional Groups	Involvement Groups	Professional Groups	Involvement Groups
Similar			Interdepartl.Planning Community Agencies Policies Service Personnel Evaluation Health of Personnel Content Areas Nature of Services Mental Health Counseling Health Appraisals	Interdepartl.Planning Community Agencies Policies School-Community Health Needs Parental Services Nature of Services School Lunch Family Medical Communications To Emotional Environ. First Aid Cumulative Records Planning Instruction	Educational Nature Pupil Involvement Communications From Safety Within Safety On Way Physical Environ. Instruct. Personnel Facilities for Services Health Needs Exceptional Pupils School Lunch Planning Instruction	Educational Nature Pupil Involvement Communications From Safety Within Safety On Way Physical Environ. Instruct. Personnel Facilities for Services Service Personnel Medical Examinations Screening Tests Mental Health Counseling Prof. Preparation Indiv. Differences Evaluation Communications With Content Areas Comm. Disease Control
Moderately Different	School-Community Indiv. Differences Dental Health		Public Health Emotional Environ. Comm. Disease Control	Public Health Health of Personnel Nature of Services Dental Health	Prof. Prepartion	Facilities for Services Exceptional Pupils Health Appraisals
Different	Family Medical Communications With		Parental Communications To Planning Services Screening Tests Cumulative Records First Aid		Medical Examinations	Continuing Education

[1]The name of each group of criteria is abbreviated.

The areas on which there were relatively high agreements between the professional groups and some of the other respondent groups provide a foundation for joint discussion and planning. Even if the respondents agreed to reject most of the criterion in a specific group, it is important to know that they agreed. Agreement was particularly high on most of the groups of criteria for healthful school living.

The relatively moderate agreements contribute also to a climate for planning and development.

The areas on which there were relatively low agreements suggest that these are areas for interdisciplinary and interdepartmental study. They include: school-community coordination; attention to individual health differences; dental health services; coordination with family medical and dental supervision; and communications with others. Other areas in which there were low agreements between some groups are also potential material for consideration. These include: school health policies and procedures; communicable disease control; counseling and follow-up; and first aid and emergency care.

There was some evidence of awareness of some of these areas. Each respondent was asked to state problems and priorities for improving the school health program. Their replies are summarized in Table 44.

TABLE 44

REPORTED PROBLEMS AND PRIORITIES

Category	Number of Times Reported as a Problem	Number of Times Reported as a Priority
Teacher Preparation	52	34
Availability of Professional Personnel	47	17
Curriculum	41	30
Interdepartmental Coordination	40	30
Special Programs - Mental Health, Dental Health, etc.	37	21
Communications	34	16
Administration and Organization	29	21
Availability of Funds and Resources	26	12
Responsibilities of Personnel	16	6
Parental Coordination	12	6
Limited Concepts of Health	10	5
Preparation of Public Health Workers	7	12
Other	26	25
Total	377*	235*

*Each respondent could report more than one problem and priority.

An average of almost three problems and an average of less than two priorities per respondent were given.

The proportion of criteria judged higher by one group than by another provides some additional information about the agreements of the respondents.

According to profession, the public health workers made as high or higher judgments than the educators, or as liberal or more liberal judgments on all of the groups of criteria except those for attention to individual health differences, the health of school personnel, the emotional and social environment, the physical environment, safety and accident prevention on the way to and from school, teacher involvement in health instruction, cumulative health records, and facilities for health services.

The directions of the judgments according to types of preparation are summarized in Chart 38.

CHART 38

COMPARISON OF THE DIRECTIONS OF JUDGMENTS ACCORDING TO TYPES OF PREPARATION

Groups of Criteria	Dual Preparation	Education Preparation	Health Preparation
Nature and Organization	More conservative[1] than education preparation group except on: educational nature of program coordination with family medical and dental supervision communication with others communications to others* More conservative than health preparation group except on: coordination with official public health programs* coordination with other community agencies school-community coordination*	More liberal[2] than dual preparation group except on: educational nature of program coordination with family medical and dental supervision communications with others communications to others* More conservative than health preparation group except on: policies and procedures* health needs interests, etc. pupil involvement appraisal and evaluation	More liberal than dual preparation group except on: coordination with official public health programs* coordination with other community agencies* school-community coordination*. educational nature of program* More liberal than education preparation group except on: policies and procedures* pupil involvement attention to individual differences
Healthful school living	More conservative than education preparation group except on: school lunch facilities and services More conservative than health preparation group except on: health of school personnel	More liberal than dual preparation group except on: school lunch facilities and services More liberal than health preparation group except on: school lunch facilities and services physical environment* control measures* practices*	More liberal than dual preparation group except on: health of school personnel More conservative than education preparation group except on: school lunch facilities and services physical environment* control measures* practices*
Health Education	More liberal than education preparation group except on: personnel for instruction teacher involvement* professional preparation* More liberal than health preparation group except on: topical content areas professional preparation personnel for instruction* health personnel	More conservative than dual preparation group except on: personnel for instruction teacher involvement* professional preparation* More conservative than health preparation groups except on: personnel for instruction* teacher involvement	More conservative than dual preparation group except on: topical content areas professional preparation* personnel for instruction* health personnel More liberal than education preparation group except on: personnel for instruction* teacher involvement
Health Services	More conservative than education preparation group except on: health appraisals* screening tests dental health services first aid and emergency care exceptional pupils* More conservative than the health preparation group except on: dental health services	More liberal than dual preparation group except on: health appraisals* screening tests dental health services first aid and emergency care exceptional pupils* More conservative than health preparation group except on: health appraisals* cumulative health records facilities for services	More liberal than dual preparation group except on: dental health services More liberal than education preparation group except on: health appraisals* cumulative health records facilities for services

[1] Liberal is used to denote higher judgments.

[2] Conservative is used to denote lower judgments.

*No difference.

In general, the dual preparation group tended to make more conservative judgments than either the education preparation group or the health preparation group except on most of the groups of criteria for health education. The education preparation group tended to make more liberal judgments than the dual preparation group except on most of the groups of criteria for health education, and more conservative judgments than the health preparation group except on some of the groups for healthful school living, those that were teacher-and-school-oriented. The health preparation group made more liberal judgments than the dual preparation group except on some of the groups for health education, and more liberal judgments than the education preparation group except on some of the groups for healthful school living.

Chart 39 shows the comparison of the directions of judgments according to length of experience.

CHART 39

COMPARISON OF THE DIRECTIONS OF JUDGMENTS ACCORDING TO LENGTH OF EXPERIENCE

Groups of Criteria	Under 10 Years	10-19 Years	20 Years and More
Nature and Organization	More liberal[1] than the 10-19-year experience group except on: school-community coordination policies and procedures communications to others	More conservative[2] than the under-10-year experience group except on: school-community coordination policies and procedures communications to others	More conservative than the under-10-year experience group except on: school-community coordination coordination with official public health programs policies and procedures communications to others
	More liberal than the 20-year-and-more experience group except on: school-community coordination coordination with official public health programs policies and procedures communications to others	More conservative than the 20-year-and-more experience group except on: coordination with other community agencies communications to others policies and procedures*	More liberal than the 10-19-year experience group except on: coordination with other community agencies communications to others policies and procedures*
Healthful School Living	More liberal than the 10-19-year experience group	More conservative than the under-10-year experience group	More conservative than the under-10-year experience group except on: safety and accident prevention within buildings and grounds emotional and social environment*
	More liberal than 20-year-and-more experience group except on: physical environment safety and accident prevention within buildings and grounds emotional and social environment*	More conservative than the 20-year-and-more experience group	More liberal than the 10-19-year experience group
Health Education	More liberal than the 10-19-year experience group except on: professional preparation continuing education* More liberal than 20-year-and-more experience group on all groups for student instruction but more conservative on professional preparation continuing education	More conservative than the under-10-year experience group except on: professional preparation, continuing education* More conservative than the 20-year-and-more experience group except on: topical content areas	More conservative than the under-10-year experience group except on: professional preparation continuing education* More liberal than the 10-19-year experience group except on: topical content areas
Health Services	More liberal than the 10-19-year experience group except on: exceptional pupils facilities for service* More liberal than the 20-year-and-more experience group except for: exceptional pupils facilities for services*	More conservative than the under-10-year experience group except on: exceptional pupils facilities for service* More conservative than the 20-year-and-more experience group except on: nature of health services dental health services exceptional pupils health appraisals facilities for health services* first aid and emergency care	More conservative than under-10-year experience group except on: exceptional pupils facilities for service* More liberal than 10-19-year experience group except on: nature of services dental health services exceptional pupils health appraisals facilities for services* first aid and emergency care

[1]Liberal is used to denote higher judgments.

[2]Conservative is used to denote lower judgments.

*No difference.

In general, the under-10-year experience group made more liberal judgments than the 10-19-year or the 20-year-and-more experience groups except on the groups of criteria for professional preparation and continuing education. The 10-19-year experience group made more conservative judgments than either the under-10-year experience group or the 20-year-and-more experience groups with some exceptions. The 20-year-and-more experience group made more conservative judgments than the under-10-year experience group except on the groups of criteria for professional preparation, for continuing education and for exceptional pupils, and more liberal than the 10-19-year experience group with some exceptions.

Those in the multiple involvement group, Group I, made more liberal judgments than those in Group II on the groups of criteria for: school-community coordination; coordination with other community agencies; health needs, interests, attitudes and practices; coordination with family medical and dental supervision; appraisal and evaluation; communications to others; all of the groups of criteria on health education except that for planning and conduct of health instruction; nature of health services; health appraisals (general); screening tests; dental health services; communicable disease control; first aid and emergency care; provisions for exceptional pupils; and as liberal judgments on the criteria for coordination with official public health programs; counseling and follow-up; and on the pair of criteria for facilities for health services.

THE CONCLUSIONS

Data obtained through a study of the judgments of persons, no matter how carefully selected, must be cautiously interpreted. In an exploratory, developmental study it is even more difficult to draw conclusions. The findings, however, support the following:

1) The endorsement of all of the guiding principles and .61 of the criteria by at least 75 per cent of the educators and the public health workers suggests that these are ready for testing.
2) The lack of endorsement of some of the criteria suggests that at least some of those not endorsed by either group, and some that were endorsed by one group but not by the other should be re-examined.
3) The relatively high agreements in the judgments of the respondents according to profession on the following groups of criteria: educational nature of programs; health needs, interests, attitudes and practices; communication from others; physical environment; safety and accident prevention within buildings and grounds; safety and accident prevention on way to and from school; school lunch facilities and services; personnel for health instruction; facilities for health services; provisions for exceptional students; and planning and conduct of health instruction, suggests that there are some areas in each of the component parts which can serve as a basis for interdisciplinary planning and development.

4) The relatively low agreements in the judgments of the respondents according to profession on the following groups of criteria: dental health services, attention to individual health differences, coordination of the school health program with family medical and dental supervision, and communications with others, suggest that in these areas further study is indicated.

5) The differences in responses according to the preparation variables, the experience variables, and the involvement variable suggest the following hypotheses for testing:

   a) The dual preparation group will be more liberal in their judgments on health education, but more conservative in their judgments on healthful school living and health services than either the education preparation group or the health preparation group.

   b) The under-10-year experience group will be more liberal in their judgments on the pupil focus of the school health program than either the 10-19-year experience group or the 20-year-and-more experience group, but will be more conservative in their judgments on professional preparation and continuing education for school health and health education than their more experienced colleagues.

c) The multiple involvement group will be more liberal in their judgments on health education and on the more direct service aspects of the school health services than those with less involvement in such leadership activities.

THE APPROPRIATENESS OF THE METHOD OF INVESTIGATION

The response was far above that of almost any of the related Canadian studies, some of which had very low or no response from persons or agencies in some provinces. This may have been related to the sponsorship of the study, to the selection of a population of leaders, and to the personal character of the invitation to participate.

The method was extremely expensive in terms of the time devoted to the analysis of the literature and to the treatment of the vast amount of data.

Collection of the data by interview was valuable experience for the writer, and would have been used by preference if distance and time had not been factors.

The length of the period of data collection was due, in part, to the use of the nominees, a practice which is justified when there is no authoritative population frame at the beginning of a study. The length of this period could have created problems had there been any unusual activity in school health that might have influenced the judgments of the respondents but fortunately nothing of the sort occurred.

The method can be commended in a situation where the professional workers are dependent in large part on the literature of related although different countries.

SOME IMPLICATIONS

Implications for Theory

Canadian educators have been less involved in theory building and testing than their American colleagues.

There was no thought of this study contributing to theory at this stage, it was intended to provide the foundation for an instrument to stimulate communications and interaction about school health programs.

There is no theoretical model of the Canadian school health program. While inferences from the endorsement and rejection of some of the criteria in this study may suggest ideas about the framework for a conceptual model of the Canadian school health program, a great deal more study is needed before even a beginning can be made. So many variables are operating that conclusions regarding cause and effect cannot be drawn on the basis of a study of this nature.

If this study can lead to the stimulation of interaction and communications, this may result in more intensive, more experimental research that might lead to some theoretical explanations and tentative construction of models for testing.

Implications for Further Studies

The next step should be the re-examination and possible redefinition of some of the rejected criteria. Following this, a tentative self-appraisal schedule should be constructed, tested, revised and retested.

The findings about the ambivalence of the respondents on the organizational pattern of the Canadian school health program suggest the need for a more intensive, and possibly extensive, study of the organizational structure.

The findings about communications with others suggest the need for research in interdisciplinary communications in the school health program including such factors as barriers to communications, the frames of reference used by each group, and role perception. Related to this might be studies of intergroup interaction and role behavior.

Differences in agreement about the coordination of selected activities in the school health program with family medical and dental supervision suggests the need for study of this dimension.

The suggestion that there are differences in judgments about the attention to individual health differences of pupils indicates the need for study of the factors that may be influential in these differences.

Some Implications for Practice

The endorsed guiding principles and criteria provide some elements of a baseline for the development of a self-appraisal schedule. The re-examination and redefinition of some criteria are prerequisite to their practical utilization in the construction of a tentative evaluation schedule.

If urgent need for such an evaluation schedule arises before the redefinition can be completed, the specifications for the rejected criteria could be sought from the professional workers and tentative criteria could be deduced from their responses.

Each respondent was promised a summary of the findings of this study. If interpreted with caution, this should be useful in providing some information about the areas in which there were relatively moderate to high agreements, and the areas in which there were relatively low agreements, between these two professional groups. This should be useful in improving professional preparation and in-service education in school health and health education.

The findings suggest a foundation of reasonable agreement and some important differences as a basis for continuing education in school health and health education of professional personnel for school health programs.

There are some indications for the development of planning groups for school health programs in terms of the support for multi-level and multidisciplinary groups.

This report could be abridged as a working document for the use of committees and planning groups. The survey of the Canadian literature, and the bibliographies, should be useful to those without time to search for these Canadian references.

The findings of this study must be interpreted only as tentative. While the guiding principles and nearly two-thirds of the criteria were endorsed these are still empirical and must be tested in field settings.

In Canada's Centennial Year, national unity and self-appraisal are being highlighted. The climate is favorable for constructive long-range planning. It is timely to focus on the interdisciplinary and interdepartmental communication, cooperation, and coordination needed for effective and efficient school health programs. As Mather said,

> The health of the school child is of paramount importance in our endeavour to make him a useful citizen. Neither the school, the health department, the parent nor the child can do it alone. It needs the cooperative effort of us all. [1]

---

[1] James M. Mather, "A Mutual Responsibility of Educational and Health Authorities." Canadian School Journal, XXX (August-September, 1952), p. 217.

APPENDIX A

A SELECTED, ANNOTATED BIBLIOGRAPHY ON THE DEVELOPMENT OF SCHOOL HEALTH PROGRAMS IN CANADA

A SELECTED, ANNOTATED BIBLIOGRAPHY ON THE DEVELOPMENT OF SCHOOL HEALTH PROGRAMS IN CANADA

Public Documents

Canada. British North America Acts 1867-1951. Ottawa: Queen's Printer, 1952.

The federal-provincial division of responsibilities is presented in this publication.

_____. Department of National Health and Welfare, Mental Health Division. School Mental Health Services in Canada. Ottawa: The Department, 1954.

This illustrates the variations in services for children in different parts of Canada.

_____. Department of National Health and Welfare. Report on National Health Grants 1948-1961. Ottawa: The Department, January, 1962.

The section of this report on health education points out some studies in school health underwritten by these grants.

_____. Dominion Bureau of Statistics. A Height and Weight Survey of Toronto Elementary School Children. Ottawa: Dominion Bureau, 1942.

This is a replication of an 1891 study in Toronto.

Ontario. Department of Education. Reports of the Minister of Education. Toronto: Queen's Printer. From 1868 to 1924.

These contain many references to the school health program while it was administered solely by the department.

_____. Department of Education. Proceedings of the Ontario Educational Association. Toronto: Queen's Printer. Annually from 1885.

These contain the papers presented at the meetings and the official business of the association.

_____. Report of the Ontario Health Survey Committee, Volumes I, II, III. Toronto: Queen's Printer, 1950.

The section on school health presents some information about its development, its status, and problems.

_____. Report of the Royal Commission on Education in Ontario. Toronto: King's Printer, 1950.

There are extensive sections on status, and recommendations for health education, healthful school living, health services, and exceptional children.

_____."Statistical Summary of Conditions in the Schools of Ontario by County Inspectors in the Year 1895." In Report of the Minister of Education for Ontario, 1895. Toronto: King's Printer, 1895.

This seems to be the first provincial report on the sanitation of Ontario schools.

Books

Bott, H. Adult Attitudes Toward Children's Misdemeanors. Toronto: University of Toronto Press, 1935.

This is a study of teachers' attitudes toward the behavior of pupils who interrupted the teaching routine.

Defries, R.D. (ed.). The Development of Public Health in Canada. Toronto: Canadian Public Health Association, 1940.

This account of the development of public health includes many references to the development of school health programs.

Emory, Florence H.M. Public Health Nursing in Canada. Toronto: The Macmillan Co., 1945.

In addition to many references to the development of school health, there is a chapter on the school child.

Griffin, J.D.M., Laycock, S.R., and Line, W. A Manual for Teachers. New York: American Book Co., 1940.

This book presents a mental health approach to school living. It suggests practical means of appraising each child's progress.

Hodgins, J. G. Documentary History of Education in Upper Canada 1791-1876. 28 Vols. Toronto: Warwich Bros., and Rutter, 1894.

These volumes contain many references to the condition of the schools and to the introduction of health teaching.

Myers, C.R. Toward Mental Health in Schools. Toronto: University of Toronto Press, 1937.

This emphasizes the mental health of teachers and pupils. It became a textbook for teacher training.

MacMurchy, Helen. The Organization and Management of Auxiliary Classes. Handbook No. 7, Toronto: Department of Education, 1915.

The basic principles of special education are presented in their application to the crippled, homebound, sight defective, the backward, and the mentally retarded child. Dr. MacMurchy, Director of Child Hygiene, Ontario Department of Health was part-time inspector of Auxiliary Classes.

Phair, John T., Power Mary, and Roberts, Robert H. A Handbook of Suggestions for Teachers in Elementary Schools. Toronto: Ryerson Press, 1938.

This book is an outcome of the study of health instruction in Ontario schools in 1931-1932, and the summer cources for teachers which began in 1933. A Joint Committee of School Health was appointed at the provincial level in 1932.

Phillips, C.E. The Development of Education in Canada. Toronto: W.J. Gage, 1957.

This contains information about the development of school health in the context of the development of education. There are many brief references and descriptions of the early school health programs.

Struthers, Lina Rogers. The School Nurse. New York: G.P. Putnam's Sons, 1917.

This is the first textbook on school nursing. Lina Rogers was the organizer of the New York City School Nursing Service and came to Toronto in 1910 as Superintendent of School Nursing.

Swanson, Marie. School Nursing in the Community Program. New York: Macmillan, 1953.

This book contains some references to the work of Lina Rogers Struthers, and the 1928 report of the Toronto Department of Health which was presented at the Sixth Annual Meeting of the American Child Health Association. The latter illustrates the emphasis on inspections and examinations.

Articles and Periodicals

Austin, Patricia. "Alberta Hastie, Pioneer Health Educator of Western Canada," Journal of the Canadian Association for Health, Physical Education and Recreation, XXIV (May, 1958), pp. 7-8.

This is a brief biography of the first lecturer in health education in teacher preparation in Western Canada. She was appointed in 1920 and developed a meaningful course in health education.

Crawford, R. Leeson, J., McHenry, E.W., and Mosley, W. "Nutritional Aspects of the Hartman Jones Memorial School Health Study. I. Preliminary Examination," Canadian Journal of Public Health, XXXVII (September, 1946), pp. 351-55.

This is a preliminary report of a study to evaluate the efficacy of an extensive health program in an elementary school.

"Children Gain More Weight Through Controlled Diet," Canadian School Journal, XXX (April, 1952), p. 107.

This is a report of the Red Cross Meal Study, a study of school lunches.

Dearness, J. "Sanitary Conditions of Rural Schools, Canadian Education Monthly VI (1884), p. 210.

Inspector Middlesex reported on the sanitary conditions of rural schools under site, ventilation, water supply, sewerage, sanitation, furniture, cleanliness, and school age.

Doyle, M.T., Cahoon, M.C., and McHenry, E.W. "The Consumption of Recommended Foods by Children in Relation to Sex, The Use of Sweet Foods, and Employment of Mothers," Canadian Journal of Public Health, XLIV (July, 1953), pp. 259-262.

This is a study of food habits of pupils in a junior high school. There was no difference on the basis of employment of the mother outside of the home.

Esler, E.M., and McHenry, E.W. A Nutrition Project to Assess the Efficacy of Classroom Teaching," Canadian Journal of Public Health, XL (March, 1949), pp. 104-108.

An attempt to evaluate classroom instruction in nutrition, food consumption of two groups of children is studied before and after an experimental period of emphasis on three objectives applied to one group. Classroom emphasis was partially effective for one objective and ineffective for the other two, but appeared to have a general effect on food use.

Griffin, J.D. "Clarence Meredith Hincks 1885-1964," Canada's Mental Health, XIII (March-April, 1965), pp. 1-4.

This is a tribute to the pioneer in the Canadian mental health movement for children. He was a school physician in Toronto in 1912.

Harold, T.C., and Hershey, J.M. "School Medical Services," Canadian Journal of Public Health," XXXIX (September, 1945), pp. 349-354.

A comparison of the defects noted independently by the public health nurse and the school physician in Central Vancouver Island Health District is described. It resulted in examination by the physician of only those referred to him as a result of a nurse-teacher conference.

Hincks, Clarence M. "Conserving Mental Health in Canada," Canadian Journal of Public Health, XXXVIII (July, 1947), pp. 317-322.

This emphasizes some of the distinctive characteristics of the development of Canadian mental health programs.

_____, "Mental Hygiene Provisions in Public Health Programs," Canadian Journal of Public Health, XXXVI (March, 1945), pp.89-95.

This article emphasizes the need for parent education programs.

Laycock, S.R. "Social and Emotional Aspects of Readiness for School," Understanding the Child, IX (June, 1940), pp. 20-23.

This is a good article on the health preparation of the child for school.

_____, "Teachers' Reactions to Maladjustments in School Children," British Journal of Educational Psychology, IV (January, 1934), pp. 11-29.

A study of the ratings of the teachers of a Western Canadian city on various pupil behavior problems. The findings were in substantial agreement with those of Wickham.

Leeson, H. Jean, McHenry, E.W., and Mosley, E. "The Value of the Wetzel Grid in the Examination of School Children," Canadian Journal of Public Health, XXXVIII (October, 1947), pp. 491-495.

Comparison of grid readings for physical and for nutritional status with estimates made by the examining physician shows agreement in slightly over one-half of the 359 elementary pupils. It was concluded that the grid placed too much reliance upon weight and height for age.

Mather, James M. "A Mutual Responsibility of Educational and Health Authorities." Canadian School Journal, XXX (August-September, 1952), pp. 216-17.

This traces the transition of the school health program from the authority of the Department of Education to the mutual responsibility of the Departments of Education and Health.

Mosley, William. "The Development of a Health Unit with Special Reference to Field Studies." Canadian Journal of Public Health, XXXIX (September, 1948), pp. 363-366.
This is a case study of the development of a health unit to be used for field studies.

O'Brien, M.J., et al. "The Incidence of Endocrine Disorders Among Toronto Public Primary School Children." Canadian Journal of Public Health, XLIV (September, 1953), pp. 329-33.
A clinical survey of 75 schools with 75,035 pupils revealed an incidence of endocrine disorder of 0.05 per cent.

"Ontario Education Workshop Report." Journal of the Canadian Association for Health, Physical Education and Recreation, XX (February, 1954), pp. 7-10.
This is a report of an interdisciplinary workshop sponsored by the Department of Education. Principles for partnership between the two departments were developed for the provincial and community levels.

"Parent Education in Canada." Food for Thought, XII (November, 1951), pp. 1-69.
The entire issue is a source of information about parent education programs in Canada.

Phair, John T. "Effectiveness of Child Health Programs in Ontario by Survey Methods," American Journal of Public Health, XXIII (January, 1933), pp. 1-9.
This is the report of the first survey of follow-up measures in school health programs in Canada.

Stogdill, C.M. Progress of Mental Hygiene Programs in Public Health in Canada," Canadian Journal of Public Health, (December, 1949), pp. 497-507.
There is some information about the development of mental health services for children in this article.

Reports

Canadian Education Association. The Status of the Teaching Profession. Toronto: The Association, 1948.
This report contains some information about healthful school living.

Canadian Public Health Association. Report of the Study Committee on Public Health Practice in Canada. Toronto: The Association, 1950.

One section of this survey was on school health. It contains some recommendations for improvement of health teaching, teacher preparation, utilization of personnel, and health services.

Canadian Red Cross Society. School Health, Accident Prevention and Elementary First Aid, Health in the Home and Community. Toronto: The Society, 1944.

This is a summary of basic content that was used by teachers as a source book.

Conway, C.B. The Hearing Abilities of Children in Toronto Public Schools. Toronto: Department of Educational Research, Ontario College of Education, 1937.

This is a report of a hearing survey in Toronto Public Schools.

National Committee for School Health Research. Health Survey of Canadian Schools, 1945-1946. Report No. 1. Toronto: The Committee, 1947.

This is a report of an extensive national survey of status in elementary and secondary schools.

_____. Some Data on Mental Health Problems in Canadian Schools. K.S. Bernhardt. Report No. 2. Toronto: The Committee, 1948.

This is a report of recommendations from the findings of the survey.

_____. Absenteeism in Canadian Schools. Report No. 3 and 4. Toronto: The Committee, 1948.

This is an outstanding study of absenteeism due to medical and non-medical causes.

_____. An Aid to Better School Housekeeping, Report No. 5. Toronto: The Committee, 1950.

This is a guide for school caretakers.

_____. Health Instruction in Teacher Training Institutions of Canada. Report No. 6. Toronto: The Committee, n.d.

This is a report of a survey about 1950.

_____. A Five-Year Program in School Health Research. A.J. Phillips. Report No. 7. Toronto: The Committee, 1950.
This is a summary of the studies undertaken by the National Committee from 1945-1950.

Ontario Educational Association. An Ideal School Health Program. Toronto: The Association, 1944.
This outlines the needs and objectives for a school health program and led to the establishment of the National Committee for School Health Research.

Ontario Teachers' Federation. Let's Talk It Over: Eight Problems in Physical and Health Education in the Elementary and Secondary Schools of Ontario. Toronto: The Federation, 1952.
This summarizes some problems in health instruction for use as a discussion guide.

Unpublished Material.

Archibald, Juanita H. "A Nutrition Education Program in Cape Sable Island," Unpublished doctoral thesis, Columbia University, 1952.
This illustrates the development of a nutrition education program in a disadvantaged community.

Brown, L.E. "A Course in Health Education, Grades VII to XII for B.C. Schools," Unpublished B.P.E. thesis, University of Oregon, 1949.
This is an example of curriculum development.

Cahoon, Margaret C., and Mosley, W. "An Evaluation of Public Health Education Practices," Unpublished report of Project 605-9-97, 1954. (Typewritten).
An interview study of 210 families in East York and Leaside reveals that the school health program was very influential in stimulating awareness of community health services.

Cahoon, Margaret C. "Special Services for Maladjusted and Emotionally Disturbed Children and Adolescents," Unpublished report, 1957.
This includes considerable information about the development of preventive and treatment services for children and youth in relation to their education.

Chell, Joseph. "A Plan for the Administration of Health Services in the Schools in British Columbia," Unpublished M.A. thesis, University of British Columbia, 1938.

The school health programs in various parts of the world were reviewed, and proposals made for the province of British Columbia.

Copp, Harold W. "The History and Development of Health and Physical Education in the Elementary and Secondary Schools of Ontario, Canada," Unpublished M.A. thesis, University of Michigan, 1933.

There is considerable information about the influence of the early pressure groups on the health education curriculum.

Department of Health and Welfare, Saanich and South Vancouver Island Health Unit. "What the Household Controllers of Health in the Saanich and South Vancouver Island Health Unit Territory Know About Their Local Health Unit." Victoria, B.C.; Department of Health and Welfare, Division of Vital Statistics, January, 1949. (Mimeographed.)

Awareness of community health services is related to the school health program. This was preceded by a pilot study in Nanaimo, B.C.

Farquharson, Jessie Y. "The Development of Health Work in East York 1923-1940." Unpublished paper, 1963. (Typewritten.)

This is a detailed account of the establishment of a school health program under the local board of education and the change to mutual responsibility by the two departments.

Kennedy, W.F.R. "Health, Physical Education and Recreation in Canada: A History of Professional Preparation." Unpublished doctoral project report. Columbia University, New York, 1955.

This is a good account of the development of the preparation of specialist health teachers.

Kibblewhite, Edward J. "Mental Hygiene Clinics with a Study of Clinic Cases of School Age," Unpublished B.Ed. thesis, University of Alberta, 1937.

Some of the development of mental health clinics from 1929 to 1937 is reviewed in this reference.

Leavens, Charles Ferris,"Health Services in the Schools of Manitoba," Unpublished M.A. thesis, University of Manitoba, 1934.

The development of school health services and recommendations for their improvement are presented.

Millar, G.J. "Health Education in Alberta Schools: A Submission to the Royal Commission on Education for the Province of Alberta." Read before the Commission May 18, 1958 (Mimeographed.)
This gives considerable attention to the development of health education in Canadian schools.

Miller, Otto, V.B. "Health Education in the Public Schools," Unpublished M.A. thesis, University of New Brunswick, 1938.
Health education in the Canadian provinces was reviewed and proposals presented for New Brunswick.

Miner, E. Louise, "History of Public Health Nursing Services in Schools in Saskatchewan." March 9, 1965. (Mimeographed.)
This outlines the development of the school health programs under boards of education and the joint involvement beginning in 1928.

Neilson, Janet. "The History of Public Health Nursing in Toronto." Edited by Zada Keefer. Toronto: Division of Public Health Nursing. Department of Health, n.d. (Mimeographed.)
A dictated manuscript by the first public health nurse to be appointed by the Board of Health for the City of Toronto.

Phair, J.T. Unpublished Papers. Toronto: The Archives of the Province of Ontario.
This collection of papers is an important source of information on the transition of responsibility to education and health responsibility, since Phair was Director of School Health in the Department of Education and transferred to the Department of Health in 1924 when the legislation was introduced, but retained a consultant position with the Department of Education.

Plewes, Doris Willard. "A Course of Study in Health, Physical Education, and Recreation, London, Ontario (Kindergarten - Grade XIII)," Unpublished doctoral dissertation, Columbia University, 1943.
This is a study in curriculum development.

Public Health Education Committee of the Canadian Mental Health Association and of the Advisory Committee of the Department of National Health and Welfare."Summary of Canadian Changes in Practices Study." Toronto: Canadian Mental Health Association, June 1954. (Mimeographed.)
This is a report of a survey of the judgments of key persons in the mental health field on the changes in practices over the past ten years and the priorities for the next ten years.

Stothers, C.E. "A History of the Special Education Section of the O.E.A." Toronto: Ontario Education Association, April 1960. (Mimeographed.)

This includes many references to the work of Dr. Helen MacMurchy, the first director of School Hygiene in Ontario. There are many references to the open-air classes, the camp schools and other special classes. It covers the period from 1908 to 1960.

Welfare Council of Toronto. "Meeting the Mental Health Needs of Children." Toronto: The Interdivisional Committee of the Toronto Welfare Council, February 1952.

A detailed report of current status with recommendations.

APPENDIX B

THE CANADIAN BACKGROUND

THE CANADIAN BACKGROUND

The guiding principles and criteria for Canadian school health programs are being moulded by conditions in the socio-cultural environment, by forces in the fields of education and public health, and by situations within the programs. These background conditions are akin to the forces in the "force field" approach to educational planning. Some are progressive forces, pushing in a direction to initiate and maintain change, while some are restraining, or preventing, change.[1]

The distinctive nature of some of these Canadian forces suggests the need for the development of national guiding principles and criteria rather than the mere adaptation of those from other countries.

Some Socio-Cultural Conditions

Three Major Societal Models

Less than one-third of Canada's population is of French origin, and almost one-half is of British origin.[2]

Naegele has said that the Canadian of British origin feels in the middle between the American and English models, while the French

---

[1] David H. Jenkins, "Social Engineering in Educational Change: An Outline of Method," Progressive Education, XXVI (May, 1949), p. 193.

[2] Frederick Elkin, The Family in Canada (Ottawa: The Canadian Conference on the Family, 1964), p. 45.

claims a more distinct, although relatively local, culture.[1]

He compared some influences of the English and American models:

> The English model stands for stable political forms, for public dignity, and social orderliness. Its literature, and up to a point its diction, stand in continuity with past accomplishments and with the promise of new departures. The ties to England are, of course, more than linguistic, as well as more than legal, economic, and historic. Yet England is to be outgrown, not rejected. Besides for some purposes - - - town planning, higher education, the organization of certain social and medical services - - - England remains the model. Oxford, Cambridge, London, are part of the "metropolis" of which Canada is the province. New York, Boston, and San Francisco are part of that metropolis also.
>
> England is no model, however, with regard to the facilities of daily living or the constraints of social stratification. In these matters Canada is part of a new world. As such it stands for the enactment of those patterns of social life which are now spread from North America to Europe. Though an industrial society, Canada may regret leaving behind some of its pre-industrial traditions; still the Canadian wants to be part of an open society, even if he submits more willingly to the facts of inequality.
>
> The United States, then, are a model with regard to opportunities and amenities, risks taken, and facts admitted. They are the source, as well, of a great deal of the intellectual and aesthetic "income" of Canada.
>
> In addition, of course, they are the source of a great deal of quite literal capital, besides providing opportunities for education and training that Canada lacks ... Both the English and American models are regarded with positive and negative emotions and judgments. Both are partly envied and imitated, admired, used, opposed, and criticized. In a measure the two models are played off against each other.

---

1 Kaspar D. Naegele, "Canadian Society: Some Reflections" Canadian Society: Sociological Perspectives, edited by Bernard R. Blishen, Frank E. Jones, Kaspar D. Naegele, and John Porter (Toronto: The Macmillan Company of Canada Ltd., 1961), p. 28.

> The social democracy of America offsets the greater constraints of English social life. The political "maturity" of a parliamentary tradition is married in Canada to a federalism, with its brand of pressures and bargains, checks and balances that are, in turn, reminiscent of political patterns in the United States.[1]

Some features of the French model are the French language, officially recognized as one of the two languages of Canada; Roman Catholic religious traditions; a self-consciousness of identity; a territorial base in the province of Quebec; the continuance of the French cultural traditions in government and the courts; greater overlap among education, religion, politics and voluntary associations; separate educational institutions; values that cherish social relations, family ties, and a greater desire to blend the demands of industrial society with the resources of the older social patterns; and, an attempt to combine a French Canadian unity with collaborative efforts with other Canadians, and the inner differentiation of French Canadian society.[2]

Continued immigration from continental Europe has changed the earlier concept of a dual culture to that of a plural culture. The structure existed, as Morton said, "For the society of allegiance admits of a diversity the society of compact does not, and one of the blessings

---

[1] Ibid.

[2] Naegele, pp. 23-33.

of Canadian life is that there is no Canadian way of life, much less two, but a unity under the Crown admitting of a thousand diversities."[1] Wrong has proposed some contributing factors: the absence of a fully developed sense of Canadian nationality; the manner in which distinctions of origin are practically and even legally maintained; the emphasis on the contribution other cultural heritages make to Canadian life; geographic and sometimes occupational segregation; and, a sense of social distance between those of British origin and even second and third generation immigrants.[2] Naegele said that there is growing concern about the character of Canadian society and culture.[3]

Population

Canada, the second largest country in area in the world, with a population of about 20,000,000,[4] has been experiencing a decline in the rate of its population growth in the past five years due, in part,

---

1 W.L. Morton, "The Character of Canadian Nationality," Social Problems: A Canadian Profile, edited by Richard Laskin (New York: McGraw Hill Company Ltd. 1964), p. 21.

2 Dennis Wrong, "Background for Understanding and Attitudes Towards Ethnic Minority Groups," Social Problems: A Canadian Profile, pp. 28-29.

3 Naegele, p. 51.

4 Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, August 4, 1966), p. 3. (June 1, 1966, estimated population was 19,919,000.)

to the drop in the birth rate from 26.1 per thousand population in 1961 to 2.14 in 1965. This is the lowest birth rate since 1939.[1]

Between 1951 and 1961 the proportion of the population under 15 years of age increased by 46 per cent. In 1961 over two-fifths of the population were under 20 years of age.[2] Since the 1961 Census, the 15-19 year age group has increased by over 18 per cent, and the 20-24 year age group has risen by nearly 11 per cent.[3] Currently about one-third of the population is under 15 years of age, and almost one-half is under 25 years of age.[4]

About one-quarter of the total population increase from 1951 to 1961 was due to immigration. Approximately one in nine persons has entered Canada since 1945.[5] Immigration in 1965 was double that in

---

[1] Ibid.

[2] Elkin, p. 17.

[3] Canada, Canada 1965-66, p. 16.

[4] D.A. Cavanagh, "Programmed Instruction and Productivity," Paper read before the meeting of the Central Canada Chapter of the National Society for Programmed Instruction, Toronto, Ontario, October 13, 1966.

[5] Frank E. Jones and Wallace E. Lambert, "Attitudes Toward Immigrants in a Canadian Community," Social Problems: A Canadian Profile, p. 249.

1961.[1] In 1963 the second largest group of immigrants came from Italy.[2] Jameison has proposed that Canada needs about 125,000 immigrants a year since there is an annual loss of about 50,000 to the United States.[3]

Industrialization and The Labor Force

In 1900 the population of Canada was about 62 per cent rural, in 1961 it was about 30 per cent with less than 40 per cent of these living on farms. In 1900 about 40 per cent of the labor force were engaged in agriculture, in 1961 only about 11 per cent. In 1961 manufacturing and construction accounted for about 54 per cent of the labor force.[4] In 1964 a sharp demand, particularly for women, in the service industries, contributed to a slight decrease in the number of people in industries producing goods.[5]

---

[1] Dominion Bureau of Statistics, Daily Bulletin, August 4, 1966, p. 3.

[2] Dominion Bureau of Statistics, Canada 1965-66, p. 24.

[3] Robert Jamieson, "Does Canada Really Want More Immigrants?", Social Problems: A Canadian Profile, p. 261.

[4] Elkin, pp. 27-28.

[5] Dominion Bureau of Statistics, Canada 1965-66, p. 196.

The working population of Canada is increasing very rapidly in a rather unusual fashion. It has been said:

> ...Over the balance of this decade, for example, the rate of growth in our labour force is likely to be 50 per cent faster than in the United States, and four or five times faster than in Western Europe. The number of young Canadians entering the work force over this period will be roughly double the number reaching retirement age. In contrast, there will be virtually no increase in the male labour force in the critically important 30-45 age group. This is creating a very great problem in developing adequate supplies of managerial skills and experience to manage our increasingly complex affairs.[1]

The Economic Council for Canada has predicted a general shortage of man-power with higher educational and skill qualifications, extending from the high school level to a severe shortage at the professional and university level.[2]

In 1965 the unemployment rate was the lowest since 1957.[3,4]

Naegele has noted the development of various one-industry communities such as Kitimat, British Columbia; the development of large corporations often involving "foreign capital", initiative, or organization; and a pattern of conflict between labor and management as forces accompanying industrialization.[4]

---

[1] D.A. Cavanagh, p. 5.

[2] Ibid.

[3] Dominion Bureau of Statistics, Canada 1965-66, p. 196.

[4] Dominion Bureau of Statistics, Daily Bulletin, (Ottawa: Dominion Bureau of Statistics, May 20, 1966), p. 3.

[5] Naegele, p. 51.

Urbanization

Seven in ten persons in Canada live in cities. In 1962, approximately two-thirds of the urban population lived in the 17 metropolitan areas. Between 1951 and 1961, 60 per cent of the population increase was in these metropolitan centres. The Gordon Commission predicted an urban population of 80 per cent by 1980.[1]

Records of the transfer of family allowance accounts have shown that there is far more mobility within each province than among provinces.[2]

Through movement across provincial borders, Saskatchewan is losing 42 per cent, and the Atlantic Provinces are losing about 31 per cent of their natural increase.[3] In the 1961-66 period the population of British Columbia increased by more than 14 per cent, and the population of Ontario and Newfoundland by more than 10 per cent.[4]

The Family

In 1961 the Canadian family was 3.9 persons while the American

---

[1] Elkin, p. 29.

[2] Elkin, p. 18.

[3] Ibid.

[4] Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, Aug. 4, 1966), p. 3.

family was 3.3 persons.[1] In 1963 the Canadian family was 4 persons.[2]

Half of the young women, who married in 1963, were married just after their twenty-first birthday, and half of the young men just before their twenty-fourth birthday.[3] The marriage rate in 1965, at 7.4 per 1,000 population, was the highest since 1959.[4] It has been suggested that this rise in marriages which is expected to continue, as an increasing number of post-war children reach marriageable ages, may gradually arrest the annual decrease in births of the past five years, even if the birth rate continues to fall.[5]

Employment of married women has increased since 1953.[6] In the early 1960's, about 25 per cent of married women, ages 20 to 64, were included in the working force.[7]

---

[1]Arthur P. Jacoby, "Some Family Problems in Canada and the United States: A Comparative Review," Social Problems: A Canadian Profile, p. 283.

[2]Canada, Canada 1965-66, p. 22.

[3]Elkin, p. 22.

[4]Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, July 18, 1966), p. 2.

[5]Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, August 4, 1966), p. 3.

[6]Dominion Bureau of Statistics, Canada Year Book 1965, p. 722.

[7]Jacoby, p. 283.

There are more one-parent homes than at any previous time in Canada.[1]

Naegele has pointed out that there is an increasing interest in personal security or well-being, and an attempt at a new balance between social organizations and private life.[2]

Jacoby attributed some of the differences between Canadian and American families to some marked differences in legislation and influences from the continental European immigration.[3]

Social Legislation

The Family Allowance Act, introduced in 1944, provides allowances of $6 a month for all children under 10 years of age, and $8 a month from 10 to 15 years. In 1964 a Youth Allowance was introduced under which $10 a month is payable for a youth age 16 or 17 while he remains in school (or if he is unable to attend school because of disability).[4]

Allowances to certain needy mothers with dependent children

---

[1] Dominion Bureau of Statistics, Canada Year Book 1964, pp. 180-81.

[2] Naegele, pp. 51-52.

[3] Jacoby, p. 283.

[4] Canada, Canada 1965-66, p. 215.

are provided by all provinces.[1]

The federal-provincial hospital insurance program, introduced in 1957, covers about 99 per cent of the insurable population.[2]

Coverage under voluntary medical care insurance has increased from 35 per cent of the population in 1953 to 52 per cent in 1962. For several years six of the ten provinces have provided physicians' services, and in some provinces more comprehensive benefits, for persons on public assistance.[3] Saskatchewan, Alberta, British Columbia, and Ontario are operating provincial prepaid medical care programs. In Saskatchewan the program is compulsory, and in the other provinces it is voluntary.[4] In Newfoundland about one-half of the population receive physicians' services at home or in hospital under the provincial Cottage Hospital Medical Care Plan, and all children under 16 years of age receive free care in hospitals.[5] A national medicare scheme (physicians' services) will be introduced in July 1968.[6]

---

[1] Ibid, p. 216.

[2] Ibid, p. 210.

[3] Ibid, p. 209.

[4] Canada, Department of National Health and Welfare, Health and Welfare Services in Canada (Ottawa: Research and Statistics Division, Department of Nation Health and Welfare, 1965), pp. 38-54.

[5] Canada, Canada 1965-66, pp. 209-210.

[6] Globe and Mail (Toronto), September 9, 1966. p. 1.

In 1965 Canada introduced a program for the "full utilization of human resources and the elimination of poverty." It includes expansion of the area development program and the agricultural rehabilitation and development program, assistance in the re-employment, relocation and retraining of workers, urban renewal measures, the establishment of a Company of Young Canadians to undertake projects for economic and social development, and the establishment of a Canada Assistance Plan to assist older, needy persons who will not be able to contribute to the Canada Pension Plan.[1]

The provisions of other social legislation, the disabled and blind persons allowance, unemployment assistance, old age assistance, and old age security, have a less direct effect on the health of children and youth.

Levels of Education of the Population

In 1960, 94 per cent of the population aged 6 to 16 were enrolled in school.[2] The 1961 Census showed that of the out-of-school population almost 2 per cent had no schooling, about 45 per cent had elementary schooling, 47 per cent had secondary schooling, about 3 per cent had

---

[1]Canada, Health and Welfare Services in Canada, p. 2.

[2]Dominion Bureau of Statistics, A Graphic Presentation of Canadian Education (Ottawa: Education Division, Dominion Bureau of Statistics, 1961), p. 4.

some university training, and almost 3 per cent had one or more university degrees.[1] In 1961, in the 15-18 year age group 60 per cent of the children whose fathers earned less than $3,000 were attending school, compared with 90 per cent of those whose fathers earned $10,000 or more.[2]

Of those who start elementary school nearly 90 per cent reach high school and about 50 per cent reach the junior leaving year. About 18 per cent of the boys and 8 per cent of the girls enter degree programs at universities, of whom slightly less than three-quarters are graduated with a first degree.[3]

In 1963-64 there was a 32 per cent increase in enrolment in vocational courses in secondary schools, and in 1964-65 a 39 per cent increase in enrolment in post-secondary technical courses.[4] In 1965-66 there was an increase of almost 15 per cent in enrolment in undergraduate courses in universities, and an increase of almost 25 per cent in enrolment in graduate work over the previous year.[5]

---

[1]Dominion Bureau of Statistics, Canada Year Book 1965, p. 329.

[2]Elkin, p. 78.

[3]Canada, Health and Welfare Services in Canada, p. 2.

[4]Dominion Bureau of Statistics, Preliminary Statistics of Education (Ottawa: Education Division, Dominion Bureau of Statistics, 1965), p. 14.

[5]Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, June 28, 1966), p. 1.

The Standard of Living

Although the cost of living, as measured by the consumer price index, has risen fairly steadily since the end of the Second World War, earnings have risen at a faster rate. Wages in manufacturing, mining, and services have more than doubled while those in construction have tripled the 1946 level.[1] In 1951, 75 per cent of the heads of salaried families earned less than $3000 a year; in 1961, only 26 per cent earned less than this amount.[2] The personal income of Canadians increased by nearly 11 per cent in 1965.[3]

Elkin has said that perhaps the best index of the rising standard of living is the increasing number of household and family conveniences and appliances. In 1963 as many as 94 per cent of households had electric refrigerators, 87 per cent had washing machines, 90 per cent had television, and 72 per cent had an automobile.[4]

In a study of expenditures on personal health care from 1953 to 1963 it was reported that one dollar in every 21 dollars of production

---

[1]Canada, Canada 1965-66, p. 202.

[2]Elkin, pp. 75-76.

[3]Dominion Bureau of Statistics, Daily Bulletin (Ottawa: Dominion Bureau of Statistics, May 31, 1966), p. 2.

[4]Elkin, p. 85.

in 1963, as compared with one dollar in 34 in 1953, was spent for personal health care, goods and services.[1]

In reference to Canadians who do not seek employment in the United States, Moore said, "The price of remaining in Canada is the acceptance of a standard of living between 25 and 30 per cent lower than the American and an annual bill for consumers of around a billion dollars in tariffs imposed by the Canadian government on imported United States goods."[2] Despite this, Canada's standard of living is third to that of the United States and Sweden.

A Comparison of the Forces of the Fields of Education and Public Health

Education and public health are influenced by relatively similar forces. Some forces influence only one field, some are evident earlier in one of these fields, and some cease to be significant sooner in one of these fields.

Federal Forces

According to the British North American Act of 1867 responsibility

---

[1] Canada, Health and Welfare Services in Canada, p. 108.

[2] Brian Moore and the Editors of Life, Canada (New York: Time Incorporated, 1963), p. 12.

for public health was divided between the federal and provincial levels,[1] while responsibility for education was delegated to the provinces with the exceptions of the education of children living in the unorganized territories, and that of Indian children.[2]

From 1867 to 1919 a number of branches of the federal government were involved in public health, and in education: The Canadian Vocational Training Branch of the Department of Labour; the Indian Affairs Branch of the Department of Citizenship and Immigration; the Department of Northern Affairs and National Resources; and the Department of Finance[3] yet there is no federal office of education, no counterpart to the National Department of Health and Welfare.

The Canadian Education Association has served in some of the roles undertaken by a federal education office in other countries, but since this is a professional association it is unable to provide comparable leadership.[4]

Provincial Forces

In most of the provinces the provincial departments of education

---

1 G.D.W. Cameron, "The Department of National Health and Welfare," The Federal and Provincial Health Services in Canada, 2nd ed., p.5.

2 Canada1965-66, p. 223

3 Report of the Canadian Education Association, "Some Aspects of the Structure of Public Education in Canada," Canadian Education XV (June, 1960), p.27.

4 Ibid, p.12.

and public health were organized between 1840 and 1880. Since there was so much variation in early community efforts the provincial departments became highly centralized, those in education somewhat earlier than those in public health.

Most provincial departments of education obtained the authority to make regulations, to prescribe courses of study, to authorize textbooks, to organize the inspection of schools, to provide teacher training, and to arrange for free schools paid for largely through local taxation under the local authorities.[1]

The scope of the provincial departments of health was broadened more slowly to provide financial assistance to local public health programs, and to provide extensive consultative and technical services such as laboratories, maternal and child health, epidemiology, public health nursing, health education, vital statistics, nutrition, occupational health, environmental sanitation and dental health. In most provinces the provincial departments of health began to provide direct services through local health units, except for the large cities.[2] The provinces of Ontario and Alberta have retained local autonomy in the provision of community health services.

Interagency involvement in the school health program is more

---

[1] Ibid, p.27.

[2] Hastings and Mosley, p.5

difficult in those provinces where the local health services are provided by the provincial department of health and there is considerable local autonomy in education.

Centralization

The financial inability of many local communities to meet increasing costs is furthering centralization in most provinces. For example, the Bryne report of the Royal Commission on Finance and Municipal Taxation in New Brunswick urged total provincial control of public elementary and secondary education in 1964.[1]

Yet there is some opposition to centralization. In the province of Ontario there is some decentralization of provincial authority in education. The Minister of Education said:

> It is my belief that education can and must be decentralized from the provincial level as well as the federal level. Generally speaking, the closer a decision can be made to the actual operating level, the more responsible and appropriate that decision will be. It is rather a recognition of the fact that the delays and difficulties inherent in referring a decision to a central office seldom improves the quality of that decision.[2]

Ten regional education offices, each with a diversified professional team have been opened.[3] Parallel decentralization of the provincial

---

[1] Dominion Bureau of Statistics, Preliminary Statistics of Education, p. 8.

[2] William G. Davis, "Ontario: A Strong Partnership With Local Groups," The Globe and Mail, March 9, 1966, p. 7.

[3] _____. Building and Educated Society 1816-1966, Statements to the Legislative Assembly of Ontario, June 1966 (Toronto: Queen's Printer, 1966), p. 29.

department of health is in progress in Ontario.[1]

Regionalization

In 1936 the Greater Vancouver Metropolitan Health Committee was organized to bring together six independent health departments, five school medical services, and the medical services of the University of British Columbia.[2]

The Municipality of Metropolitan Toronto Act brought 11 boards of education into a Metropolitan School Baord in 1954 not as a replacement for these boards, but as another level between these boards and the provincial department, to handle some activities and programs of mutual concern to all of the boards.[3]

In the Metropolitan Toronto area health departments have not been metropolitanized although many other public services have been. The number of municipalities was reduced on January 1, 1967,[4] but each will retain its own health department.

Hastings and Mosley have suggested that at least hospitals and public health services should be regionalized:

---

[1] K.C. Charron, "Current Trends in Health Services Planning and Development in Ontario," Paper read before the 17th Annual Meeting of the Ontario Public Health Association, Toronto, Ontario, October 19, 1966.

[2] J.J. Taylor, "The Health Branch of the British Columbia Department of Health Services and Hospital Insurance," The Federal and Provincial Health Services in Canada, 2nd ed., p. 125.

[3] Metropolitan Toronto School Board, The Case for Equalization of Educational Opportunity in Metro Toronto, Toronto: Metropolitan Board, 1962, pp. 79.

[4] Ontario, An Act to Amend the Municipality of Metropolitan Toronto Act, given Royal Assent, May 18, 1966.

> Scientific, social, and economic changes are making the traditional pattern of separately developed and administered community health services less and less efficient. Circumstances have combined to create a rapid proliferation of health services of ever increasing complexity. The resultant overlapping of service in some areas, gaps in services in other areas, and uneconomic use of skilled personnel and complex facilities are hampering the ultimate objective of providing a balanced pattern of modern community health services which work together effectively. Segregated community health service planning and administration should be ended.
> Therefore, the main suggestion is for a regional administrative pattern of all organized community health services in Ontario.[1]

They advocated that organized rehabilitation, mental health, home care, ambulance services, and health services for the aged become other components in this regionalization, and when circumstances permit, the official social welfare services.[2]

The community social planning councils are regionalizing planning between related health, welfare, and to a degree, education agencies, on a voluntary basis, in an attempt to provide more effective and efficient services.

School areas are likewise being combined into larger units. In one province the township is the basis for elementary school districts, and the county for the secondary school districts. In 1965 the number of rural school boards in this province was reduced by more than 75 per cent.[3]

---

[1] Hastings and Mosley, p. 69.

[2] Ibid

[3] Davis, p. 9.

Professionalization

Professional preparation began about fifty years earlier in education than in public health. The traditional one-year preparation of elementary teachers is being replaced by a university program in six provinces, and is planned for a seventh.[1] Some persons in both education and public health have done graduate work in the United States or in Britain.

The Canadian Education Association was organized in 1891,[2] The Canadian Teachers' Federation in 1920,[3] and the Association Canadienne des Educateurs de Langue Française in 1947.[4] The Canadian Public Health Association was incorporated in 1910.[5] Provincial public health associations have been organized in most of the provinces within the past two decades. There is a major difference between the professional associations in education and those in public health: most public health workers have membership in a national professional association related to their basic professional training such as medicine, dentistry, or nursing, so that the professional public health association

---

[1] Dominion Bureau of Statistics, Preliminary Statistics of Education, p. 10.

[2] Report of the Canadian Education Association, p. 12.

[3] Ibid, pp. 27-28.

[4] "Survey of Educational Research in Canada 1953 to 1955-56," Ontario Journal of Educational Research, I (October, 1958), p. 15.

[5] R.D. Defries (ed.), "The Canadian Public Health Association 1910-1959," Federal and Provincial Health Services, n.p.

tends to be a secondary professional association.

There are only two interprofessional, national committees on school health, a joint committee of the Canadian Medical Association and the Canadian Association of Physical, Health Education and Recreation, and a committee of the Canadian Health Education Specialists Society. These are in no way comparable to the Joint Committee of the National Education Association and the American Medical Association.

There are far more books, reports and journals in Canadian education than on Canadian public health. British and American books, reports, and periodicals are used by both educators and public health workers.

Shortages of Workers

In both fields there are serious shortages of professional workers. In one province, emergency measures were taken in teacher preparation more than a decade ago,[1] and are still in operation. The most serious shortages in the educational field are now in secondary schools and colleges. In some provinces it has been necessary to employ staff members without public health preparation in order to carry on community health programmes.

---

[1] Department of Education Memorandum, The Argus, XIV (January, 1955), p. 5.

Resistance to Change

The explosion of knowledge is fostering change. It has been said:

> ... Today's educators have a formidable task in seeking to select what to teach, especially in cumulative fields such as the natural and behavioural sciences. If the accumulation is plotted on a time line, beginning with the birth of Christ, it is estimated that the first doubling of knowledge occurred in 1750, the second in 1900, the third in 1950, and the fourth in 1960.[1]

Computer retrieval systems are being established in some of the large urban departments of education.[2] Some of the medical and scientific information is being made availabe in abstract form.

Significant discoveries are being made about man and his behavior, including learning, many of which have potential application in education and in public health. Yet, the Canadian Teachers' Federation conducted a survey in 1962 which revealed that less than one per cent of Canadian school children had had any contact with programmed instruction.[3]

Robinson has pointed out that there is some resistance to the introduction of some of these new discoveries:

---

[1] Dominion Bureau of Statistics, Canada Year Book 1965, p. 339.

[2] City of Toronto.

[3] F.G. Robinson, "Educational Trends and Change," Canadian School Journal, XLII (January-February, 1964), p. 69.

> ... But what should concern us most is that, to date, the professional educator has not only failed to influence educational change significantly, but that the school has shown itself to be actually resistant to the testing and incorporation of ideas which seem capable of helping us with our basic problem of improving the efficiency of the educational process.[1]

Some of this resistance may be due to communication gaps, and other pressures on staff members.

Some Forces in Community School Health Programs

Some of the forces within the school health program have their basis in the development of the program, and in the interagency and interdisciplinary nature of the program. Among other things this is because:

1) The component parts of the school health program were introduced at different periods in the development of education and public health.

2) The early development of school health programs was undertaken by local boards of education and only later became interagency programs.

3) While educators and public health workers have a common goal in the promotion of the health of children and youth, they may have different priorities for health in their value schemes.

4) The educators tend to have a more homogeneous set of roles than the public health workers who have a variety of roles.

---

[1] Ibid, p. 67.

5) There tends to be some overlap of the functions of the members of the two teams that is conducive to interaction and communication because the members of the health team are not ordinarily in the school on a full-time basis.

6) There may be times when the authority and power of the leadership of one group is not recognized as legitimate by the members of the other group.

7) There may be decision-making by the members of one group that impinges on that of the members of the other group and not be understood by them.

8) Professional terminology each team may be a barrier to communication.

9) In very large schools there may be restriction of opportunities for interaction and communications between the members of the two teams.

10) As specialists and special departments have been introduced into the school (the physical education department, the guidance department, and the special education department) there may have been lack of definition of their relationships to the school health program.

11) The physical facilities and the equipment for the provision of the school health program, and the manner in which they are provided, may influence the operation of the program.

12) The geographic areas of responsibility for school administration and for public health administration may not coincide: a public health department may have to work with a number of different boards of education.

13) The educators are concerned with the child and youth attending school while the public health workers are concerned also with those above and below this age range.[1]

The impact of some of these forces is illustrated in the development of Canadian school health programs.

Summary

It is difficult, if not impossible, to attempt to assess all of the influence of these forces. However, it is probably reasonable to suggest that some of the progressive elements include the rising standard of living, the benefits of social legislation, the increasing levels of education, regionalization, and professionalization. Probably the most restraining forces are those related to the differences in administrative responsibilities at the federal, provincial, and local levels for public health and education. The rate at which the younger segments of the population are increasing and the shortage of professional

---

[1] Margaret C. Cahoon, "Role Relations in School Health Programs," Unpublished paper submitted in partial fulfillment of the requirements in Education A 730: Sociological Study of Human Learning and Educational Systems, University of Michigan, December 12, 1963, pp. 97.

workers encourage expedient measures. A large influx of non-English speaking immigrants has taken disproportionate amounts of time on the part of both public health workers and educators.

These forces illustrate some of the trends that are impinging upon the development of the Canadian school health programs. They provide the frame of reference for planning and evaluation for their improvement.

APPENDIX C

THE INTERVIEW SCHEDULE - QUESTIONNAIRE INSTRUMENT

THE APPLICABILITY OF SELECTED GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMMES IN CANADA

Margaret C. Cahoon,
R. 211, School of Hygiene,
University of Toronto,
Toronto 5,
Ontario.

A QUESTIONNAIRE TO DETERMINE THE APPLICABILITY OF SELECTED GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMMES IN CANADA

These guiding principles and criteria have been selected from Canadian, British and American books, reports and periodicals available to Canadian public health workers and educators. Preference has been given in their selection to the most recent Canadian statement. The wording has been altered as little as possible in the belief that a group of selected leaders in public health and in education should make the appropriate changes.

Would you help in determining whether these are applicable as guidelines for the planning, development and maintenance of school health programmes for the next ten or fifteen years? This is not an attempt to determine present status although many of the statements relate to things that are being done at present. Your judgment will indicate whether you believe these should be continued or discontinued.

Would you rate each statement as "Definitely not applicable" (DNA), "Possibly applicable" (PA), or "Definitely applicable" (DA) by checking the appropriate letters ( ) at the side of the page according to what you think about the statement? Your responses will be treated as highly confidential information.

The information provided under "Comments" will be a very valuable part of this study. If you consider that some of these statements are too idealistic please modify them. If you believe that an alternative statement is more suitable please write it in and indicate its applicability. If you feel that there has been an important omission would you add it at the end of the appropriate section?

A summary of the analysis of the judgments of applicability and the proposed modifications will be sent to you as soon as possible.

Would you please complete this and return it to Miss Margaret C. Cahoon, R. 211, School of Hygiene, University of Toronto, Toronto 5, Ontario, before August 20, 1965?

Questionnaire No. _____

PART A

THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAMME

NOTE: The guiding principles are capitalized. The criteria are not capitalized.

Please check ( ) the appropriate code.

I. THE SCHOOL HEALTH PROGRAMME SHOULD PROVIDE FOR THE UNDERSTANDING, PROTECTION, PROMOTION, AND RESTORATION OF THE PHYSICAL, EMOTIONAL AND SOCIAL HEALTH OF STUDENTS AND STAFF MEMBERS THROUGH HEALTHFUL SCHOOL LIVING, HEALTH EDUCATION, AND SCHOOL HEALTH SERVICES. /DNA/PA/DA/

Comments:

1. The school health programme should strengthen and supplement:
   a) Parental responsibility. /DNA/PA/DA/

      Comments:

   b) Family medical and dental supervision. /DNA/PA/DA/

      Comments:

2. The school health programme should be coordinated with:
   a) The appropriate public health programmes. /DNA/PA/DA/

      Comments:

   b) The entire educational programme. /DNA/PA/DA/

      Comments:

3. The school health programme should be based on:
   a) The expressed, observed, and anticipated health needs of students. /DNA/PA/DA/

      Comments:

   b) The health interests of students. /DNA/PA/DA/

      Comments:

   c) The health attitudes of students. /DNA/PA/DA/

      Comments:

d) The health practices of students. /DNA/PA/DA/

Comments:

e) Other factors. (Please write in and rate.)

4. The school health programme should be organized and administered jointly by the provincial and local departments of education and departments of health. /DNA/PA/DA/

Comments:

5. Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation:
a) At the provincial level. /DNA/PA/DA/

Comments:

b) At the local level. /DNA/PA/DA/

Comments:

6. School health policies and procedures should:
a) Be determined jointly by departments of education and departments of health. /DNA/PA/DA/

Comments:

b) Provide direction for the programme. /DNA/PA/DA/

Comments:

c) Define the responsibilities of personnel. /DNA/PA/DA/

Comments:

d) Be interpreted to teachers and other school personnel. /DNA/PA/DA/

Comments:

e) Be interpreted to related professional groups. /DNA/PA/DA/

Comments:

f) Be interpreted to parents. /DNA/PA/DA/

Comments:

7. There should be a planned programme of evaluation of the entire school health programme:
   a) On a continuous basis. /DNA/PA/DA/

      Comments:

   b) On a periodic basis. /DNA/PA/DA/

      Comments:

8. Please write in and rate any other guiding principles and criteria related to the nature and organization of school health programmes in Canada that have been omitted.

/DNA/PA/DA/

Questionnaire No. _____

PART B

HEALTHFUL SCHOOL LIVING

The Health of School Personnel

II. THE SELECTION OF HEALTHY SCHOOL PERSONNEL AND THE SUBSEQUENT ASSESSMENT, PROTECTION, AND PROMOTION OF THEIR HEALTH SHOULD BE FUNDAMENTAL TO THE PROVISION OF HEALTHFUL SCHOOL LIVING. /DNA/PA/DA/

Comments:

1. The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide:
   a) Pre-employment medical examinations. /DNA/PA/DA/

   Comments:

   b) Periodic medical examinations. /DNA/PA/DA/

   Comments:

   c) Arrangements for all school personnel to participate in screening tests offered in the school health services. /DNA/PA/DA/

   Comments:

   d) Arrangements for all school personnel to receive appropriate immunizations offered in the school health services. /DNA/PA/DA/

   Comments:

2. Sick leave provisions should be liberal enough to encourage school personnel to remain home when ill. /DNA/PA/DA/

   Comments:

3. An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill. /DNA/PA/DA/

   Comments:

The Emotional and Social Environment

III. THE ENTIRE SCHOOL PROGRAMME SHOULD PROMOTE AN ENVIRONMENT FAVOURABLE TO THE EMOTIONAL AND SOCIAL HEALTH OF PUPILS AND STAFF. /DNA/PA/DA/

Comments:

4. The school should foster opportunities for the development of good interpersonal relationships:
   a) Among students. /DNA/PA/DA/

   Comments:

   b) Among staff members. /DNA/PA/DA/

   Comments:

   c) Between staff members and students. /DNA/PA/DA/

   Comments:

   d) Between staff members and parents. /DNA/PA/DA/

   Comments:

5. Teachers should plan their teaching:
   a) To permit mastery of subject matter by each pupil at his own rate. /DNA/PA/DA/

   Comments:

   b) To provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear. /DNA/PA/DA/

   Comments:

6. The teacher should understand home and community influences in order to work effectively with pupils with specific health problems. /DNA/PA/DA/

   Comments:

7. The pupil-teacher ratio should be:
   a) Small enough to permit individual attention to all pupils. /DNA/PA/DA/

   Comments:

b) Large enough for group activities. /DNA/PA/DA/

Comments:

8. Policies should be adapted to individual needs and achievements of pupils with regard to such matters as:
a) Grade placement. /DNA/PA/DA/

Comments:

b) Grouping within the classroom. /DNA/PA/DA/

Comments:

c) Homework assignments. /DNA/PA/DA/

Comments:

d) Reporting of pupil's progress. /DNA/PA/DA/

Comments:

9. Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped. /DNA/PA/DA/

Comments:

10. Perfect, or near-perfect, attendance should not be over-emphasized since this tends to keep the sick child in school. /DNA/PA/DA/

Comments:

11. Pupils should be released from class on the request of the parent to keep selected medical and dental appointments. /DNA/PA/DA/

Comments:

The Physical Environment

IV. THE ENTIRE SCHOOL PLANT (CONSISTING OF SITE, BUILDINGS AND EQUIPMENT), AND SERVICES SHOULD BE CONDUCIVE TO THE HEALTH AND SAFETY OF PUPILS AND STAFF. /DNA/PA/DA/

Comments:

12. In the selection of a school site consideration should be given to those factors likely to influence health and safety. /DNA/PA/DA/

Comments:

13. Construction and maintenance of school buildings should be in accordance with, or superior to, minimum required standards with regard to:
a) A safe water supply. /DNA/PA/DA/

Comments:

b) Safe drinking water. /DNA/PA/DA/

Comments:

c) Heating and ventilation. /DNA/PA/DA/

Comments:

d) Continual control of heating and ventilation. /DNA/PA/DA/

Comments:

e) Lighting and its control. /DNA/PA/DA/

Comments:

f) Lavatory and toilet facilities and supplies. /DNA/PA/DA/

Comments:

g) Sanitary garbage and sewage disposal. /DNA/PA/DA/

Comments:

h) Other. (Please write in and rate.)

14. The medical officer of health, and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation, and safety:
a) On an annual basis. /DNA/PA/DA/

Comments:

b) Less frequently unless requested. /DNA/PA/DA/

Comments:

15. When improvements are indicated as a result of such inspections the medical officer of health, and/or the public health inspector, should:
a) Send a written report to the educational administrator and the local board of education. /DNA/PA/DA/

Comments:

b) Meet with the educational administrator and the board of education to discuss the findings and assist in the planning of corrective action. /DNA/PA/DA/

Comments:

16. Seating should be adjusted regularly to meet the individual needs of the pupils. /DNA/PA/DA/

Comments:

17. Pupils should aid in the maintenance of the cleanliness and neatness of:
a) Classrooms. /DNA/PA/DA/

Comments:

b) Toilets and lavatories. /DNA/PA/DA/

Comments:

Safety and Accident Prevention

18. The possibility of accidents and fires in schools should be minimized through:
a) Design of the plant. /DNA/PA/DA/

Comments:

b) Provision of good equipment. /DNA/PA/DA/

Comments:

c) Inspection on a regular basis. /DNA/PA/DA/

Comments:

d) Proper maintenance. /DNA/PA/DA/

Comments:

e) A planned programme of fire and accident prevention. /DNA/PA/DA/

Comments:

f) Other. (Please write in and rate.)

19. Safety measures in physical education programmes, in laboratories, and in shops, should be given special attention through:
a) The provision of safe facilities. /DNA/PA/DA/

Comments:

b) The use of the best protective equipment. /DNA/PA/DA/

Comments:

c) Instruction. /DNA/PA/DA/

Comments

d) Careful supervision of the students. /DNA/PA/DA/

Comments:

e) Development of habits of safety. /DNA/PA/DA/

Comments:

f) Other. (Please write in and rate.)

20. In promoting safety, the services of the following municipal departments should be utilized:
a) The police department. /DNA/PA/DA/

Comments:

b) The fire department. /DNA/PA/DA/

Comments:

21. Pupils should participate in the maintenance of standards of safety and fire prevention. /DNA/PA/DA/

Comments:

22. With regard to traffic safety:
    a) Traffic problems in the school area should be controlled in so far as possible. /DNA/PA/DA/

    Comments:

    b) School zones should be clearly marked. /DNA/PA/DA/

    Comments:

    c) Trained traffic guards, on duty at appropriate times in urban areas, should be:
    i) Students. /DNA/PA/DA/

    Comments:

    ii) Adults. /DNA/PA/DA/

    Comments:

23. All school buses should:
    a) Meet, or exceed, legal minimum standards for the transportation of pupils. /DNA/PA/DA/

    Comments:

    b) Be maintained in safe operating condition. /DNA/PA/DA/

    Comments:

    c) Be manned by bus drivers qualified for such driving. /DNA/PA/DA/

    Comments:

    d) Be manned by bus drivers in good physical and mental health. /DNA/PA/DA/

    Comments:

School Lunch Facilities and Services

V. WHEN PUPILS CANNOT RETURN HOME FOR LUNCH THE PROVISION OF SCHOOL LUNCH FACILITIES AND SERVICES SHOULD BE IMPORTANT PARTS OF HEALTHFUL SCHOOL LIVING, SHOULD CONTRIBUTE TO GOOD NUTRITION, AND SHOULD PROVIDE IMPORTANT LEARNING EXPERIENCES. /DNA/PA/DA/

Comments:

24. When students bring lunches there should be:
    a) Adequate storage facilities for the lunches. /DNA/PA/DA/

    Comments:

b) A sanitary place to eat lunch. /DNA/PA/DA/

Comments:

25. School lunch rooms should be large enough to permit students to eat there whether they buy lunch or bring it from home. /DNA/PA/DA/

Comments:

26. Lavatories and toilets should be located near lunchrooms to promote handwashing before eating. /DNA/PA/DA/

Comments:

27. If food is prepared, cooked and served in the school there should be required minimum standards with respect to:
a) The quality of the food. /DNA/PA/DA/

Comments:

b) Selection according to Canada's Food Guide. /DNA/PA/DA/

Comments:

c) No carbonated beverages, chocolate milk, gum or candy for sale. /DNA/PA/DA/

Comments:

d) An adequate quantity of food. /DNA/PA/DA/

Comments:

e) Storage of food. /DNA/PA/DA/

Comments:

f) Refrigeration. /DNA/PA/DA/

Comments:

g) Preparation. /DNA/PA/DA/

Comments:

h) Cooking. /DNA/PA/DA/

Comments:

i) Serving. /DNA/PA/DA/

Comments:

j) Dishwashing. /DNA/PA/DA/

Comments:

k) Waste disposal. /DNA/PA/DA/

Comments:

l) Other. (Please write in and rate.)

28. The public health inspector should provide the same assistance to the lunchroom manager and staff, and the same degree of supervision, as to any other place preparing and serving food. /DNA/PA/DA/

Comments:

29. a) An adequate number and type of foodhandlers should be employed. /DNA/PA/DA/

Comments:

b) All foodhandlers should be instructed in sanitary foodhandling and personal health practices. /DNA/PA/DA/

Comments:

c) Toilet and lavatory facilities should be provided for foodhandlers. /DNA/PA/DA/

Comments:

30. School lunch facilities and services should be used for instruction of the students in:
a) Foodhandling practices. /DNA/PA/DA/

Comments:

b) Food selection. /DNA/PA/DA/

Comments:

c) Proper eating habits and social customs. /DNA/PA/DA/

Comments:

31. Please write in and rate any other guiding principles and criteria related to healthful school living that have been omitted. /DNA/PA/DA/

Questionnaire No. _____

PART C

HEALTH EDUCATION

VI. HEALTH EDUCATION SHOULD UTILIZE AND PROVIDE LEARNING EXPERIENCES FOR THE PURPOSE OF FAVOURABLY INFLUENCING UNDERSTANDINGS, ATTITUDES AND HABITS RELATED TO INDIVIDUAL, FAMILY, AND COMMUNITY HEALTH AND SAFETY. /DNA/PA/DA/

Comments:

1. Health instruction should permeate the entire curriculum and life of the school. /DNA/PA/DA/

   Comments:

2. An individual or group of individuals with specific qualifications in health education should be delegated responsibility for the overall planning of health education:
   a) Within the school system. /DNA/PA/DA/

      Comments:

   b) Within each school. /DNA/PA/DA/

      Comments:

3. Curriculum planning should involve all individuals and groups likely to contribute to health instruction. /DNA/PA/DA/

   Comments:

4. The major responsibility for health teaching in the elementary school should belong to:
   a) The classroom teacher. /DNA/PA/DA/

      Comments:

   b) The classroom teacher assisted by a consultant in health education. /DNA/PA/DA/

      Comments:

   c) A specialist teacher in health education. /DNA/PA/DA/

      Comments:

5. In junior high and high schools the major responsibility for health instruction should be delegated to teachers with special preparation in health education. /DNA/PA/DA/

   Comments:

6. Each teacher, no matter what his subject area, should have concern for the individual health needs, interests, and health guidance of his pupils. /DNA/PA/DA/

   Comments:

7. Professional health personnel should assist school personnel in:
   a) Determining health needs and objectives. /DNA/PA/DA/

      Comments:

   b) Assessing the scientific accuracy of instructional content, and teaching materials. /DNA/PA/DA/

      Comments:

   c) Curriculum development. /DNA/PA/DA/

      Comments:

   d) Classroom teaching on occasion. /DNA/PA/DA/

      Comments:

   e) In-service education programmes. /DNA/PA/DA/

      Comments:

   f) Parent education programmes. /DNA/PA/DA/

   g) Other. (Please write in and rate.)

8. Such professional health personnel should include:
   a) Staff members involved in the school health services. /DNA/PA/DA/

      Comments:

   b) Other staff members from the local department of health. /DNA/PA/DA/

      Comments:

   c) Staff members from appropriate voluntary health agencies. /DNA/PA/DA/

      Comments:

d) Others. (Please write in and rate.)

9. Systematically organized health instruction should be provided for all pupils in all grades. /DNA/PA/DA/

Comments:

10. Systematically organized health instruction should receive attention equal to that of any major part of the curriculum. /DNA/PA/DA/

Comments:

11. Health instruction should be correlated with instruction in other subject matter fields such as:
a) Physical education. /DNA/PA/DA/

Comments:

b) Science. /DNA/PA/DA/

Comments:

c) Home economics. /DNA/PA/DA/

Comments:

d) Social studies. /DNA/PA/DA/

Comments:

e) Driver education. /DNA/PA/DA/

Comments:

f) Other. (Please write in and rate.)

12. Informal and more incidental health teaching in relation to daily activities should supplement systematically organized health teaching. /DNA/PA/DA/

Comments:

13. Inidividual health guidance in relation to health needs and practices should supplement systematically organized health teaching. /DNA/PA/DA/

Comments:

14. The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:

a) Growth, structure and functions of the human body. /DNA/PA/DA/

Comments:

b) Consumer health education:

i) The need for health care. /DNA/PA/DA/

Comments:

ii) The reliability of sources of health information. /DNA/PA/DA/

Comments:

iii) Selection of health services and products. /DNA/PA/DA/

Comments:

iv) Local and provincial health and welfare services and programmes. /DNA/PA/DA/

Comments:

c) Nutritional needs, good food habits, and desirable social practices and attitudes. /DNA/PA/DA/

Comments:

d) Dental development and dental care. /DNA/PA/DA/

Comments:

e) First aid procedures. /DNA/PA/DA/

Comments:

f) Home nursing procedures. /DNA/PA/DA/

Comments:

g) Safety practices for the prevention of, and protection from, accidents. /DNA/PA/DA/

Comments:

h) Causes and prevention of important non-communicable diseases. /DNA/PA/DA/

Comments:

i) Causes and prevention of important communicable diseases. /DNA/PA/DA/

Comments:

j) Family living:
   i) Adolescent changes. /DNA/PA/DA/

      Comments:

   ii) The value of the family system. /DNA/PA/DA/

      Comments:

   iii) Preparation for marriage and family life (in senior high grades). /DNA/PA/DA/

      Comments:

   iv) Recognition that the family has the primary responsibility for this teaching. /DNA/PA/DA/

      Comments:

k) The influence of heredity in relation to personal and community health problems. /DNA/PA/DA/

Comments:

l) The influence of population increase in relation to personal and community health problems. /DNA/PA/DA/

Comments:

m) Factors affecting mental and emotional health. /DNA/PA/DA/

Comments:

n) Study of personality and adjustment. /DNA/PA/DA/

Comments:

o) The nature of physical fitness and the need for exercise, rest, and recreation to maintain it. /DNA/PA/DA/

Comments:

p) Emotional, social, and physical health aspects of:
   i) Smoking. /DNA/PA/DA/

      Comments:

ii) Alcohol. /DNA/PA/DA/

Comments:

iii) Drugs. /DNA/PA/DA/

Comments:

iv) Chemicals and toxins in the environment. /DNA/PA/DA/

Comments:

q) Vocations and careers in the health sciences and applied fields. /DNA/PA/DA/

Comments:

r) Developments in health research applicable to improvement of personal and community health practices. /DNA/PA/DA/

Comments:

s) National and international health problems and programmes. /DNA/PA/DA/

Comments:

t) Other. (Please write in and rate.)

15. The objectives and methods of health teaching should:
a) Stimulate active participation of the pupils in the learning experiences. /DNA/PA/DA/

Comments:

b) Stress the use of health information. /DNA/PA/DA/

Comments:

16. Students should be afforded learning experiences through:
a) Field trips to community official and voluntary health agencies. /DNA/PA/DA/

Comments:

b) Participation in the programmes of community official and voluntary health agencies. /DNA/PA/DA/

Comments:

17. Up-to-date, authoritative, and accurate materials, and audio-visual aids, from a wide range of sources should be readily available to teachers and pupils. /DNA/PA/DA/

Comments:

18. The classroom space for health teaching should be:
a) Comparable to that for other subjects. /DNA/PA/DA/

Comments:

b) Adequate for the storage of models, charts, and experimental equipment. /DNA/PA/DA/

Comments:

19. There should be a planned programme for parent education and for community understanding of the school health programme provided by:
a) The school. /DNA/PA/DA/

Comments:

b) The school and the local department of health. /DNA/PA/DA/

Comments:

Professional Preparation and Continuing Education

VII. ALL PERSONNEL INVOLVED IN THE SCHOOL HEALTH PROGRAMME SHOULD BE ADEQUATELY PREPARED AND ENCOURAGED TO PARTICIPATE IN CONTINUING EDUCATION PROGRAMMES. /DNA/PA/DA/

Comments:

20. Specialized health personnel should:
a) Be certified or licensed in their respective fields of competence. /DNA/PA/DA/

Comments:

b) Be prepared in public health. /DNA/PA/DA/

Comments:

c) Meet, or surpass, the minimum professional qualifications recommended by the provincial department of health. /DNA/PA/DA/

Comments:

d) Meet, or surpass, the minimum recommended qualifications of the Canadian Public Health Association. /DNA/PA/DA/

Comments:

21. Comprehensive preparation in school health and health education should be required of all prospective teachers to meet the minimum licensing requirements of the provincial department of education. /DNA/PA/DA/

Comments:

22. Special preparation for health teachers for junior high and senior high schools, in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include:
a) Work in the biological sciences. /DNA/PA/DA/

Comments:

b) Work in the social sciences. /DNA/PA/DA/

Comments:

c) Work in the physical sciences. /DNA/PA/DA/

Comments:

23. Special preparation for health teachers for junior and senior high schools should include professional health courses in teacher preparation in order to meet the minimum requirements of the provincial department of education for specialist standing. /DNA/PA/DA/

Comments:

24. All new professional health personnel to serve schools should become acquainted with the administrative and instructional programmes, and problems, of the schools through pre-service or orientation programmes. /DNA/PA/DA/

Comments:

25. All new administrators and teachers should become acquainted with the public health programmes, and problems, during pre-service or orientation programmes. /DNA/PA/DA/

Comments:

26. A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. /DNA/PA/DA/

Comments:

27. More informal in-service learning experiences should be planned in relation to:
a) Supervision. /DNA/PA/DA/

Comments:

b) Consultation. /DNA/PA/DA/

Comments:

c) Service on functional school and community health committees. /DNA/PA/DA/

Comments:

d) Participation in health organizations. /DNA/PA/DA/

Comments:

28. In-service programmes should be provided for non-instructional school personnel such as:
a) Foodhandlers. /DNA/PA/DA/

Comments:

b) Bus drivers. /DNA/PA/DA/

Comments:

c) Custodians. /DNA/PA/DA/

Comments:

d) Others. (Please write in and rate.)

29. Please write in and rate any other guiding principles and criteria related to school health education that have been omitted. /DNA/PA/DA/

Questionnaire No. _____

PART D

SCHOOL HEALTH SERVICES

VIII. SCHOOL HEALTH SERVICES SHOULD BE ORGANIZED TO PROTECT, PROMOTE, AND RESTORE THE HEALTH OF STUDENTS AND STAFF; TO ASSIST IN ADAPTING THE EDUCATIONAL PROGRAMMES TO THE MENTAL AND PHYSICAL ABILITIES AND NEEDS OF PUPILS; AND TO UTILIZE FULLY THE COMMUNITY RESOURCES TO MEET THE HEALTH NEEDS OF CHILDREN AND YOUTH WITHOUT GAPS OR DUPLICATION OF FACILITIES AND SERVICES. /DNA/PA/DA/

Comments:

1. All school health service activities should:
   a) Provide positive learning experiences for the students. /DNA/PA/DA/

   Comments:

   b) Be utilized in health teaching. /DNA/PA/DA/

   Comments:

2. School health services should make provisions to:
   a) Appraise the health status of pupils. /DNA/PA/DA/

   Comments:

   b) Appraise the health status of staff members. /DNA/PA/DA/

   Comments:

   c) Encourage and facilitate the correction of remediable defects. /DNA/PA/DA/

   Comments:

   d) Assist the pupil to adjust to non-remediable defects. /DNA/PA/DA/

   Comments:

   e) Counsel students. /DNA/PA/DA/

   Comments:

   f) Counsel staff members. /DNA/PA/DA/

   Comments:

g) Counsel parents, through home visiting when indicated. /DNA/PA/DA/

Comments:

h) Help prevent and control disease. /DNA/PA/DA/

Comments:

i) Plan for the health supervision of school personnel. /DNA/PA/DA/

Comments:

j) Plan for the emergency care of injured and severely ill students and staff members. /DNA/PA/DA/

Comments:

k) Assist in the identification of exceptional (handicapped) pupils. /DNA/PA/DA/

Comments:

l) Assist in planning for the health supervision of exceptional (handicapped) pupils. /DNA/PA/DA/

Comments:

m) Assist in adapting the school programme to meet the needs of exceptional (handicapped) pupils. /DNA/PA/DA/

Comments:

n) Coordinate the community resources to meet the health needs of pupils. /DNA/PA/DA/

Comments:

3. Specialized health personnel should be available on an adequate time basis related to:
a) The needs of the students. /DNA/PA/DA/

Comments:

b) The nature of the educational programme. /DNA/PA/DA/

Comments:

c) The community health problems. /DNA/PA/DA/

Comments:

4. Auxiliary personnel, such as the certified nursing assistant, the audiometric technician and the clerk, should be employed under the direct supervision of qualified professional health personnel to release the professional worker from tasks not requiring professional competencies. /DNA/PA/DA/

Comments:

5. The social worker should be introduced:
   a) In an advisory capacity to professional health workers, educational administrators and teachers. /DNA/PA/DA/

   Comments:

   b) As a member of the staff of the local department of health. /DNA/PA/DA/

   Comments:

6. If the local board of education wants more extensive school health services than the local board of health can provide, it should:
   a) Contract with the local board of health for the purchase of additional services. /DNA/PA/DA/

   Comments:

   b) Establish supplementary school health services. /DNA/PA/DA/

   Comments:

Health Appraisals

7. Health appraisal procedures should include:
   a) Teachers' observations and referrals. /DNA/PA/DA/

   Comments:

   b) Screening tests. /DNA/PA/DA/

   Comments:

   c) Medical and dental examinations. /DNA/PA/DA/

   Comments:

   d) Psychological examinations. /DNA/PA/DA/

   Comments:

   e) Psychiatric examinations. /DNA/PA/DA/

f) Utilization of cumulative health records. /DNA/PA/DA/

Comments:

g) Counseling. /DNA/PA/DA/

Comments:

h) Follow-up procedures for students with suspected or known defects. /DNA/PA/DA/

Comments:

i) Other. (Please write in and rate.)

8. The classroom teacher should participate in the health appraisals in order to more clearly understand the health needs of pupils in relation to their performance. /DNA/PA/DA/

Comments:

9. Individual teacher-nurse conferences should be held regularly:
   a) To discuss the teacher's health observations. /DNA/PA/DA/

   Comments:

   b) To share information about the health status of pupils including reports of screening procedures and examinations. /DNA/PA/DA/

   Comments:

10. In schools where each pupil has a number of different teachers every day, the homeroom teacher should be recognized as having responsibility for the daily health supervision, and guidance, of the pupils. /DNA/PA/DA/

Comments:

11. In large schools, a liaison committee, composed of such persons as the principal, vice-principal, school health physician, public health nurse, guidance director, physical and health education directors and other appropriate individuals, should function to facilitate:
    a) Exchange of information. /DNA/PA/DA/

Comments:

b) Joint planning. /DNA/PA/DA/

Comments:

Screening Tests

12. Adequate preparation for screening tests should include preparation of: /DNA/PA/DA/
a) Pupils.

Comments:

b) Teachers. /DNA/PA/DA/

Comments:

c) Parents. /DNA/PA/DA/

Comments:

13. Vision screening tests should be provided:
a) With a lighted Snellen chart (and/or other methods approved by the provincial department of health). /DNA/PA/DA/

Comments:

b) For all pupils referred by self, teacher, and/or parents. /DNA/PA/DA/

Comments:

c) For all pupils at appropriate intervals. /DNA/PA/DA/

Comments:

d) Including colour vision screening once in an upper grade of the elementary school. /DNA/PA/DA/

Comments:

14. Hearing should be screened:
a) With a pure tone audiometer (and/or other methods approved by the provincial department of health). /DNA/PA/DA/

Comments:

b) For all pupils referred by self, teacher, and/or parent with suspected hearing loss or speech defect. /DNA/PA/DA/

Comments:

c) For all pupils at appropriate intervals. /DNA/PA/DA/

Comments:

15. As part of the school health services, measurements of height and weight should be determined and recorded:
a) For all pupils two or three times a year. /DNA/PA/DA/

Comments:

b) For only those pupils for whom surveillance of the growth pattern is indicated. /DNA/PA/DA/

Comments:

16. Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals. /DNA/PA/DA/

Comments:

17. All positive reactors to the tuberculin test should be given a chest x-ray at once, repeated at intervals dependent upon the findings. /DNA/PA/DA/

Comments:

18. The introduction of other screening tests should be discussed with:
a) The local medical and/or dental society. /DNA/PA/DA/

Comments:

b) Appropriate voluntary health agencies. /DNA/PA/DA/

Comments:

Medical Examinations

19. The physician who attends the pupil regularly should be encouraged to do the routine medical examinations of the pupil. /DNA/PA/DA/

Comments:

20. A parent should be present at any medical examination of the young pupil whether in the school health services, physician's office, or clinic. /DNA/PA/DA/

Comments:

21. There should be plans for parental counseling with regard to the older pupil who may not want the parent present during the medical examination if the findings suggest the need for follow-up procedures. /DNA/PA/DA/

Comments:

22. The school health physician should examine routinely, or arrange for the examination of, only those pupils who are not able to obtain an examination from a private physician or clinic. /DNA/PA/DA/

Comments:

23. Referral medical examinations should be provided by the school health physician for those pupils referred by the public health nurse, teacher, and/or parent with suspected or known liabilities not under medical supervision. /DNA/PA/DA/

Comments:

24. Medical examinations provided in the school health services should be of a quality:
a) To command medical respect. /DNA/PA/DA/

Comments:

b) To provide sufficient information to guide counseling of pupils and parents. /DNA/PA/DA/

Comments:

c) To provide a desirable learning experience for the pupil. /DNA/PA/DA/

Comments:

Dental Health Services

25. The dental health services should be preventive and educational in nature. /DNA/PA/DA/

Comments:

26. If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries. /DNA/PA/DA/

Comments:

27. In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries. /DNA/PA/DA/

Comments:

28. School dental inspections should be utilized:
a) To estimate group dental needs. /DNA/PA/DA/

Comments:

b) To facilitate community planning to meet dental needs. /DNA/PA/DA/

Comments:

c) Other. (Please write in and rate.)

29. Pupils should be referred to the family dentist or dental clinic for routine dental examination and correction of dental defects. /DNA/PA/DA/

Comments:

30. If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately. /DNA/PA/DA/

Comments:

31. Dental emergencies that occur when the dental staff members are in the school should be given temporary, palliative treatment, if necessary, and referred to the family dentist or dental clinic. /DNA/PA/DA/

Comments:

Mental Health Services

32. Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include:
a) Psychological examination and evaluation. /DNA/PA/DA/

Comments:

b) Social evaluation of the pupil and his home. /DNA/PA/DA/

Comments:

c) Counseling pupil and parents. /DNA/PA/DA/

Comments:

d) Psychiatric examination and assessment. /DNA/PA/DA/

Comments:

e) Special class placement. /DNA/PA/DA/

Comments:

f) Other. (Please write in and rate.)

33. The services of child guidance clinics, and/or mental health clinics, should be available for any student in need of further assessment and therapy. /DNA/PA/DA/

Comments:

34. School health personnel should participate in the procedures of the child guidance clinics and mental health clinics in:
a) Referral. /DNA/PA/DA/

Comments:

b) Preparation of the social evaluation (case history). /DNA/PA/DA/

Comments:

c) Case conferences. /DNA/PA/DA/

Comments:

d) Follow-up procedures. /DNA/PA/DA/

Comments:

e) Other. (Please write in and rate.)

35. Reports of psychological and psychiatric examinations should:
a) Be recorded on the school health records. /DNA/PA/DA/

Comments:

b) Be recorded only as confidential information. /DNA/PA/DA/

Comments:

c) Be interpreted to staff members. /DNA/PA/DA/

Comments:

d) Be discussed with pupil and parents in terms of capabilities. /DNA/PA/DA/

Comments:

36. Periodic appraisal of mental health needs and services for pupils should be made through analysis of:
a) Student drop-out rates. /DNA/PA/DA/

Comments:

b) Case studies. /DNA/PA/DA/

Comments:

c) Consultation case loads. /DNA/PA/DA/

Comments:

d) Other. (Please write in and rate.)

Cumulative Health Records

37. Parents should be encouraged to provide information about the health history of the child and family:
a) During the school registration conference or preschool medical examination. /DNA/PA/DA/

Comments:

b) Following any subsequent significant illness. /DNA/PA/DA/

Comments:

38. The cumulative school health records should:
a) Be filed in the school. /DNA/PA/DA/

Comments:

b) Accompany the pupil from grade to grade. /DNA/PA/DA/

Comments:

c) Accompany the pupil from school to school. /DNA/PA/DA/

Comments:

d) Have restrictions regarding the forwarding of certain confidential information. /DNA/PA/DA/

Comments:

39. Teachers should be encouraged to use the cumulative health records. /DNA/PA/DA/

Comments:

40. Teachers should have the opportunity to contribute significant information to these health records. /DNA/PA/DA/

Comments:

Counseling and Follow-up Services

41. Counseling and follow-up procedures should involve:
a) Pupils. /DNA/PA/DA/

Comments:

b) Parents. /DNA/PA/DA/

Comments:

c) Family physicians and dentists. /DNA/PA/DA/

Comments:

d) Teachers and administrators. /DNA/PA/DA/

Comments:

42. Counseling and follow-up procedures should focus on:
a) The significance of appraisal findings. /DNA/PA/DA/

Comments:

b) The need for further examination and/or treatment. /DNA/PA/DA/

Comments:

c) The utilization of community resources to assist in the provision of needed assessment and/or treatment. /DNA/PA/DA/

Comments:

d) Helping the pupil to accept responsibility for his own health. /DNA/PA/DA/

Comments:

e) Other. (Please write in and rate.)

43. There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. /DNA/PA/DA/

Comments:

44. There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family. /DNA/PA/DA/

Comments:

45. Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others should be coordinated. /DNA/PA/DA/

Comments:

46. The school health physician and the public health nurse should initiate follow-up steps to ensure necessary medical care for all pupils whose parents are unable to provide it. /DNA/PA/DA/

Comments:

47. The correction of defects should be appraised:
a) On an individual basis. /DNA/PA/DA/

Comments:

b) Through periodic surveys of correction rates. /DNA/PA/DA/

Comments:

<u>The Prevention, Detection and Control of Communicable Diseases</u>

48. The school should contribute to the prevention, detection, and control of communicable diseases through the application of policies and procedures:
a) Determined jointly by the departments of health and departments of education. /DNA/PA/DA/

Comments:

b) Coordinated with those of appropriate voluntary health agencies. /DNA/PA/DA/

Comments:

c) Interpreted to and understood by local physicians. /DNA/PA/DA/

Comments:

d) Interpreted to and understood by parents. /DNA/PA/DA/

Comments:

49. The local health department should provide each school with:
a) A list of reportable communicable diseases. /DNA/PA/DA/

Comments:

b) A list of non-reportable communicable diseases. /DNA/PA/DA/

Comments:

c) Copies of official regulations concerning isolation, quarantine, and exclusion. /DNA/PA/DA/

Comments:

d) Periodic reports on the prevalence and distribution of communicable diseases. /DNA/PA/DA/

Comments:

50. All school personnel should be instructed in the recognition of observable signs and symptoms of communicable diseases and the specific measures for their control. /DNA/PA/DA/

Comments:

51. Levels of immunity against smallpox, diphtheria, tetanus, whooping cough, and poliomyelitis should be established in infancy and maintained in the preschool years so that the child enters school with protection against these diseases. /DNA/PA/DA/

Comments:

52. Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil. /DNA/PA/DA/

Comments:

53. The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health. /DNA/PA/DA/

Comments:

54. Pupils should be readmitted to school after a reportable communicable disease only after official release from the local department of health. /DNA/PA/DA/

Comments:

55. School personnel should encourage parents to keep pupils at home when genuinely ill. /DNA/PA/DA/

Comments:

56. The school should cooperate in the execution of specific public health regulations and recommendations for the control of diseases spread by insects and animals. /DNA/PA/DA/

Comments:

57. There should be a planned programme of tuberculosis prevention, detection and control for:
a) All pupils. /DNA/PA/DA/

Comments:

b) All school personnel. /DNA/PA/DA/

Comments:

Plans for the Provision of First Aid and Emergency Care

58. The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of and periodic assessment of a planned programme for first aid and emergency care. /DNA/PA/DA/

Comments:

59. The medical officer of health should provide:
a) A list of first aid supplies. /DNA/PA/DA/

Comments:

b) Advice regarding the location and upkeep of first aid kits. /DNA/PA/DA/

Comments:

c) A guide for first aid and emergency procedures. /DNA/PA/DA/

Comments:

60. The provision of emergency care and first aid for students and staff members should be primarily the responsibility of the school administration with the assistance of professional health personnel, if in the school, at the time of a serious emergency. /DNA/PA/DA/

Comments:

61. School personnel should limit their first aid and emergency measures to those defined in the above-mentioned guide. /DNA/PA/DA/

Comments:

62. One person in each school should be responsible for first aid and emergency plans. /DNA/PA/DA/

Comments:

63. All teachers should have first aid preparation equivalent to the Red Cross Course or St. John Ambulance Course. /DNA/PA/DA/

Comments:

64. The first aid and emergency procedures should be interpreted to:
a) Parents. /DNA/PA/DA/

Comments:

b) Local physicians and dentists (regarding dental emergencies). /DNA/PA/DA/

Comments:

65. Detailed information should be obtained from all staff members, and from parents for all pupils, at the beginning of each school year, to facilitate locating the parent or guardian, and using the physician and hospital of choice in an emergency. /DNA/PA/DA/

Comments:

66. The school plant should be planned, and specific procedures established for the protection of pupils in the event of likely, or possible, natural types of disaster such as fire, flood, tornado, or blizzard, striking the school or community. /DNA/PA/DA/

67. Each school should have an accident record form to be:
a) Completed on every accident. /DNA/PA/DA/

Comments:

b) Reviewed periodically in terms of accident prevention measures. /DNA/PA/DA/

Comments:

The Facilities for School Health Services

68. The school health room or suite should provide adequate space and facilities to administer the school health services carried on within the school. /DNA/PA/DA/

Comments:

69. This room or suite should be located where it can be supervised by a member of the school staff when not under the supervision of a member of the professional health staff. /DNA/PA/DA/

Comments:

Provisions for Exceptional (Handicapped) Pupils

70. The local medical officer of health, or the school health physician, should provide medical consultation to the educational administrator and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils. /DNA/PA/DA/

Comments:

71. The school health programme for exceptional pupils should:
a) Be the same as for other pupils. /DNA/PA/DA/

Comments:

b) Be more comprehensive than for other pupils. /DNA/PA/DA/

Comments:

c) Pay particular attention to their emotional and social adjustment. /DNA/PA/DA/

Comments:

d) Other. (Please write in and rate.)

72. There should be appropriate adaptations of the following to meet the health needs of some of the exceptional pupils:
a) The school programme. /DNA/PA/DA/

Comments:

b) The school building. /DNA/PA/DA/

Comments:

c) The teaching facilities. /DNA/PA/DA/

Comments:

73. There should be provisions for exceptional pupils in:
a) The regular classroom. /DNA/PA/DA/

Comments:

b) Special classes. /DNA/PA/DA/

Comments:

c) Special schools. /DNA/PA/DA/

Comments:

74. Please write in and rate any other guiding principles and criteria related to the school health services in Canada that have been omitted. /DNA/PA/DA/

75. Has any area been omitted that is very important to you?

76. What are the greatest problems, in your estimation, in improving the school health programmes in Canada? (Please list three or four in order of importance.)

1.

2.

3.

4.

77. Are there priorities? (If so, please list four or five in order of importance.)

1.

2.

3.

4.

5.

78. Can you suggest one or two schools where you think the school health programme is particularly good? (Please give the name and location of each school, and the name of the person to contact.)

1.

2.

79. Would you like to nominate one or two other persons whom you feel should participate in this study? (Please give full name and address.)

1.

2.

80. Any additional information:

Questionnaire No. _____

PERSONAL DATA

Name _____

Address _____

Present position _____

Number of years in present position _____

Previous related positions _____

_____

Please check the types of experience you have had on this table:

Public Health	Education
Local	Elementary teaching
Provincial	Secondary teaching
National & international	Supervision & administration
Supervision & administration	College & university teaching
College & university teaching	Other
Other	

Total number of years of experience _____

Professional preparation (Please indicate countries in which preparation was obtained.) _____

_____

Research in, or related to, school health (Please indicate whether completed or in progress.) _____

_____

_____

Publications on, or related to, school health (Please write in, or attach, and give titles and sources.) _____

_____

_____

Committee responsibilities in school health (Please indicate whether current or previous committee responsibilities.) _____

_____

_____

Teaching responsibilities (Please indicate whether present or previous.) _____

_____

Additional information:

APPENDIX D

A COMPARISON OF THE 1950 AND 1962 TERMINOLOGY IN SCHOOL HEALTH EDUCATION

A COMPARISON OF THE 1950 AND 1962 TERMINOLOGY IN SCHOOL HEALTH EDUCATION

Comparison of the 1950 and 1962 definitions of school health education terms illustrates that, "Definitions reflect concepts and practices and, as changes occur, definitions must be altered to incorporate new meanings".[1]

1950 Definitions[2]	1962 Definitions[3]
School Health Program	School Health Program
The school procedures that contribute to the understanding, maintenance and improvement of the health of pupils and school personnel, including health services, health education and healthful school living.	The composite of procedures used in school health services, healthful school living, and health science instruction to promote health among students and school personnel.

---

[1]Committee on Terminology in Health Education, "Terminology," Journal of Health, Physical Education and Recreation, XXXIII (November, 1962), p.27.

[2]Committee on Terminology in Health Education, "Terminology," Journal of Health, Physical Education and Recreation, XXII (October, 1950), pp.14-16

[3]Committee on Terminology in Health Education. "Terminology," Journal of Health, Physical Education and Recreation, XXXIII (November, 1962), pp. 27-28.

1950 Definitions (Continued)

School Health Services

The school procedures which are established to

a) appraise the health status of pupils and school personnel;
b) counsel pupils, parents, and other persons involved, concerning appraisal findings;
c) encourage the correction of remediable defects;
d) help plan for the health care and education of handicapped children;
e) help prevent and control disease;
f) provide emergency care for the sick and injured.

Health Appraisal

That phase of school health service which seeks to assess the physical, mental, emotional and social health status of individual pupils and school personnel through such means as health histories, teachers' and nurses' observations, screening tests, medical, dental and psychological examinations.

1962 Definitions (Continued)

School Health Services

The procedures used by physicians, dentists, nurses, teachers, etc., designed to appraise, protect, and promote optimum health of students and school personnel.

(Activities frequently included in school health services are those used to:

1) appraise the health status of students and school personnel;
2) counsel students, teachers, parents, and others for the purpose of helping school-age children get treatment or for arranging education programs in keeping with their abilities;
3) help prevent or control the spread of disease;
4) provide emergency care for injury or sudden sickness.

Health Appraisal

The evaluation of the health status of the individual through the utilization of varied organized and systematic procedures such as medical and dental examinations, laboratory tests, health history, teacher observation, etc.

Health Observation

The estimation of an individual's well-being by noting the nature of his appearance and behavior.

Medical Examination

The determination, by a physician, of an individual's health status.

1950 Definitions (Continued)

School Health Counseling

The procedures by which nurses, teachers, physicians, guidance personnel and others interpret to pupils and parents the nature and significance of a health problem and aid them in formulating a plan of action, which will lead to solution of the problem.

School Health Education (from the point of view of the school program)

The process of providing learning experiences for the purpose of influencing knowledges, attitudes and conduct relating to individual and group health.

1962 Definitions (Continued)

Screening Test

A medically and educationally acceptable procedure for identifying individuals who need to be referred for further study or diagnostic examination.

Dental Examination

The appraisal, performed by a dentist, of the condition of the oral structures to determine the dental health status of the individual.

Dental Inspection

The limited appraisal, performed by anyone with or without special dental preparation, of the oral structures to determine the presence or absence of obvious defects.

Cumulative School Health Record

A form used to note pertinent consecutive information about a student's health.

Health Counseling

A method of interpreting to students or their parents the findings of health appraisals and encouraging and assisting them to take such action as needed to realize their fullest potential.

School Health Education

The process of providing or utilizing experiences for favorably influencing understandings, attitudes, and practices relating to individual family, and community health.

1950 Definitions (continued)

Healthful School Living

A term which designates the provision of a safe and healthful environment, the organization of a healthful school day, and the establishment of interpersonal relationships favorable to the best emotional, social and physical health of pupils.

1962 Definitions (Continued)

Health Science Instruction

The organized teaching procedures directed toward developing understandings, attitudes, and practices relating to health and factors affecting health. (This is a departure from the term health instruction. Health science instruction seems an appropriate term to describe the act of teaching scientific facts and truths upon which individuals must base decisions and actions in order to achieve their health potentials. Health science encompasses areas of knowledge such as child growth and development, the human body, biological needs of the human organism, psychosocial needs of the individual, hazards to life and health, progress in human health and the scientific basis for health care, biological and psychosocial needs in the home and family, community health services, and national and international health.)

Safety Education

The process of providing or utilizing experiences for favorably influencing understanding, attitudes, and practices relating to safe living.

Healthful School Living

The utilization of a safe and wholesome environment, consideration of individual health, organizing the school day, and planning classroom procedures to favorably influence emotional, social, and physical health.

1950 Definitions (Continued)

Health Coordination

The process of developing relationships within the school health program and between school and community health programs which contribute to harmonious action in the solution of problems relating to pupil health.

School Health Council

A representative group of persons organized for the purpose of study, planning and action aimed at the identification and solution of school health problems.

1962 Definitions (Continued)

Healthful School Environment

The physical, social, and emotional factors of the school setting which affect the health, comfort, and performance of an individual or a group.

Health Coordination

A process designed to bring about a harmonious working relationship among the varied personnel and groups in the school and community that have interest, concern, and responsibility for development and conduct of the school health program.

(Coordination may be achieved through formal or informal procedures and may be highly structured or offer little evidence of structuring of any type. The school health council is an example of the formal procedure for securing coordination. The membership of such a council usually is representative of various agencies and different professions as well as selected school personnel interested in or concerned with school health procedures and programs. In some instances, certain responsibilities for achieving coordination are delegated by the administrator to one or more individuals within a school or school system. An individual given responsibilities for coordination may be designated as a school health consultant, school health director, school health supervisor, or school health coordinator. From time to time, attempts have been made to assign specific characteristics to each of these titles. However, general agreement as to title and characteristic has not been achieved. There is some agreement among leaders in the field on certain distinguishing qualities associated with each title. Each one requires special professional preparation and experience, In addition, the

1950 Definitions (Continued)

School Health Educator

A person specially qualified to serve as a teacher, consultant, coordinator or supervisor of health education in an individual school or a school system.

1962 Definitions (Continued)

basic characteristic of the consultant is the ability to provide a high degree of expertness with little administrative or supervisory responsibility; administrative responsibility and authority are distinguishing features of the director; the title of supervisor implies some authority for guidance and directing and lesser degree of administrative responsibility; and the coordinator functions with little or no administracive or supervisory power, but attempts to achieve program coordination by developing inter-personal relationships among individuals and groups in position to influence the school health program.)

School Nurse

An individual with professional preparation in both public health nursing and education who works cooperatively with teachers, parents, and students to help achieve the purpose of the school health program.

Public Health Educator

An individual with professional preparation in education and public health who helps develop and initiate programs to improve health understandings, attitudes, and practices in the community.

School Health Educator or Health Science Teacher

An individual professionally prepared and certified to teach health science and give leadership in developing the health science curriculum.

1950 Definitions (Continued)

1962 Definitions (Continued)

School Medical Advisor

A physician who provides counsel and assistance with the school procedures influencing the health and well-being of students and school personnel.

Private Health Agency

A nongovernmental group organized to protect or improve the health of individuals and groups.
(Frequently referred to as a voluntary health agency.)

Public Health Agency

A tax-supported organization, charged by law with the responsibility of maintaining, protecting, and promoting the health and well-being of the people of a governmental unit.
(Frequently referred to as an official health agency.)

Professional Health Agency

A group with established standards of membership, composed of persons specially prepared in some health disciplines and organized for the purpose of upgrading the quality of their services and improving their contribution to the public's health.

APPENDIX E

THE SOURCES OF THE GUIDING PRINCIPLES AND CRITERIA

SOURCES OF THE GUIDING PRINCIPLES AND CRITERIA

Public Documents

Alberta. Report of the Royal Commission on Education. Edmonton, Alta.: Queen's Printer, 1959.

British Columbia. A Précis of the Report of the Royal Commission on Education in British Columbia. Victoria, B.C.: Queen's Printer, 1960.

Great Britain. Chief Medical Officer. Reports to the Ministry of Education. London: Her Majesty's Stationery Office, 1958-59 to 1963-64.

_____. Ministry of Education. Education in 1963 Being the Report of the Ministry of Education for England and Wales. London: Her Majesty's Stationery Office, 1964.

_____. Ministry of Education. Half Our Future: A Report of the Central Advisory Council on Education. London: Her Majesty's Stationery Office, 1963.

Nova Scotia. Report of the Royal Commission on School Construction in Nova Scotia. Halifax: Queen's Printer, 1958.

Ontario. Department of Education. Suggestions for the Layout and Construction of Schools in Ontario. Revised September 1955; Toronto: The Department, 1955.

United States of America. Health of Children of School Age. Children's Bureau Publication 427. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1964.

_____. White House Conference on Children and Youth, Golden Anniversary, 1960. Recommendations: Composite Report of Forum Findings. Washington, D.C.: Superintendent of Documents, U.S. Government Printing Office, 1960.

Books

Anderson, C.L. School Health Practice. 3rd ed.; St. Louis: C.V. Mosby 1964.

Bibby, Cyril. Health Education: A Guide to Principles and Practice. London: William Heinemann Ltd., 1955.

Clements, F.W., and McCloskey, B.P. (eds.). Child Health: Its Origins and Promotion. London: Edward Arnold, 1964.

Croskery, George G., and Nason, Gerald (eds.). Addresses and Proceedings of the Canadian Conference on Education. Ottawa: Mutual Press, 1958.

Defries, E.D. (ed.). The Federal and Provincial Health Services in Canada. 2nd ed., rev.; Toronto: The Canadian Public Health Association, 1962.

Denver Board of Education. Health Interests of Children. Denver: Board of Education, 1947.

Grout, Ruth E. Health Teaching in Schools. 4th ed.; Philadelphia: W.B. Saunders Co., 1963.

Haag, Jessie Helen. School Health Programme. New York: Holt, Rinehart and Winston, Inc., 1965.

Hanlon, John J., and McHose, Elizabeth. Design for Health. Philadelphia: Lea and Febiger, 1963.

Humphrey, James H., Johnson, Warren R., and Moore, Virginia D. Elementary School Health Education. New York: Harper Bros., 1962.

Irwin, Leslie, Cornacchia, Harold, and Staton, Wesley. Health in Elementary Schools. St. Louis: C.V. Mosby, 1962.

Irwin, Leslie W., and Mayshark, Cyrus. Health Education in Secondary Schools. St. Louis: C.V. Mosby, 1964.

Joint Committee on Health Problems, National Education Association and American Medical Association. Health Education. 5th ed., rev.; Washington, D.C.: National Education Association, 1961.

_____. School Health Services. Washington, D.C.: National Education Association, 1959.

_____. Healthful School Living. Washington, D.C.: National Education Association, 1959.

Kilander, H. Frederick. School Health Education. New York: Macmillan Co., 1962.

La Salle, Dorothy, and Geer, Gladys. Health Instruction for Today's Schools. Englewood Cliffs, N.J.: Prentice-Hall, 1963.

Langton, Clair V., Allen, Ross L., and Wexler, Philip. School Health Organization and Services. New York: The Ronald Press, 1961.

Laycock, S.R. Mental Hygiene in the School. Toronto: Copp Clark Co., 1960.

Leff, S., and Leff, Vera. The School Health Service. London: H.K. Lewis Co., 1959.

National Study of Secondary School Evaluation. Evaluative Criteria 1960 Edition. Washington, D.C.: National Study of Secondary School Evaluation, 1960.

_____. Evaluative Criteria for Junior High Schools. Washington, D.C.: National Study of Secondary School Evaluation, 1963.

National Union of Teachers. School Administration: A Handbook of Advice and Information. Liverpool: Charles Birchall and Sons, 1964.

Nemir, Alma. The School Health Program. Philadelphia: W.B. Saunders Co., 1959.

Oberteuffer, Delbert. School Health Education. 3rd ed.; New York: Harper Bros., 1960.

Price, Fred W. The Second Canadian Conference on Education: A Report. Toronto: University of Toronto Press, 1962.

Seely, John R., Sim. R. Alexander, and Loosely, Elizabeth W. Crestwood Heights: A Study of the Culture of Suburban Life. Toronto: University of Toronto Press, 1956.

Smith, Helen Norman, and Wolverton, Mary E. Health Education in the Elementary School. New York: The Ronald Press, 1959.

Transcriptions of the Hearings of the Royal Commission on Health Services. Volumes I - LXVIII. Toronto: The Canadian Pharmaceutical Association, 1961.

Turner, C.E., Sellery, C. Morley, and Smith, Sara Louise. School Health and Health Education. St. Louis: C.V. Mosby, 1961.

Tyhurst, J.S. et al. More for the Mind: A Study of Psychiatric Services in Canada. Toronto: The Canadian Mental Health Association, 1963.

Vannier, Mary Helen. Teaching Health in Elementary Schools. New York: Harper and Row, 1963.

Willgoose, Carl E. Health Education in the Elementary School. Philadelphia: W.B. Saunders Co., 1959.

Yearbooks

American Association of School Administrators. Health in the Schools. rev., 1951: Washington, D.C.: National Education Association, 1951.

Medovy, Harry (ed.) School Health Problems. Pediatric Clinics of North America. Philadelphia: W.B. Saunders Co., November, 1965.

National Society for the Study of Education. Mental Health in Modern Education, Part II, Fifty-fourth Yearbook. Chicago: The Society, 1955.

Yearbook Commission on Teacher Health, NEA Interprofessional Committee. Fit to Teach. Edited by Fred Hein. Washington, D.C.: American Association for Health, Physical Education and Recreation, National Education Association, 1957.

Articles and Periodicals

American Public Health Association. "Report of the Committee on School Health Service Facilities of the American Public Health Association," Journal of School Health, XXXVIII (January, 1958), pp. 7-17.

Armstrong, Jill et al. "A Report on the Food Habits and Physical Activities of Grade Nine Students in Metropolitan Toronto," Journal of the Canadian Association for Health, Physical Education and Recreation, XXX (August-September, 1964), pp. 20-24 and 32.

Barrett, Kevin A. "High School Students' Smoking Habits," Canadian Journal of Public Health, LIII (December, 1962), pp. 500-06.

Beattie, Alice. "Let's Look at School Health Services," Canadian Nurse, LX (November, 1964), pp. 1062-65.

Benson, K.I.G., and Beattie, Alice. "A New Approach to the School Health Program," Canadian Journal of Public Health, LV (September, 1964), pp. 371-379.

Best, E.W.R., and Walker, C.B. "A Canadian Study of Smoking and Health, Second Report," Canadian Journal of Public Health, LV (January, 1964), pp. 1-11.

Canadian Public Health Association Policy Statement on Immunization, Adopted November 21, 1964, Canadian Journal of Public Health, LV (February, 1965), p. 83.

Eldrich, S. "Teachers' Attitudes to Health Education," Health Education, XX (January, 1962), pp. 16-21.

Federation of Women Teachers' Associations of Ontario. "A Survey of the Problems of Female Rural Elementary School Teachers in Ontario," Canadian School Journal, XL (August-September, 1962) 1962), pp. 341-43.

Langstaff, Isabelle E. "Health Education in Tea chers' Colleges," Canadian Nurse, LIV (December, 1958), pp. 1110-12.

MacKinnon, Archie R. "Breaking New Ground in Teacher Education," Canadian School Journal, XLIV (September, 1966), pp. 26-28.

Maternal and Child Health Section, Canadian Public Health Association. "A Brief on Immunization Policy for the Canadian Public Health Association," Canadian Journal of Public Health, LVI (February, 1965), pp. 83-87.

Mattison, Berwyn, F."Working Together for School Health," Journal of School Health, XXXIII (April, 1963), pp. 158-163.

Morison, James B., and Medovy, H. "Smoking Habits of Winnipeg School Children," Canadian Medical Association Journal, LXXXIV (May 6, 1961), pp. 1006-12.

Morison, James B. et al. "Health Education and Cigarette Smoking: A Report on a Three-Year Program in the Winnipeg Schools 1960-1963," Canadian Medical Association Journal, LXXXVII (July, 11, 1964), pp. 49-56.

Morison, James B. "Cigarette Smoking: Surveys and a Health Education Program in Winnipeg, Manitoba, Canadian Journal of Public Health, LV (January, 1964), pp. 16-32.

Nix, Margaret E. "The Modern School Health Program," Education: A Collection of Essays on Canadian Education, Volume 2, 1950-58. Toronto: W.J. Gage, 1959, pp. 17-20.

Palko, Michael E. "Highlights of a Report on the Preparation of Elementary School Teachers in Canada in Health and Health Education," Canadian Journal of Public Health, LVI (May, 1965), pp. 207-09.

Pierce, W.J. "Health with Education: Today's Opportunities," The Royal Society of Health Journal, LXXVII (October, 1957), pp. 703-07.

Rich, Ruth. "Health Education Needs of High School Students in a Large Diversified Metropolitan Area," Research Quarterly, XXXI (December, 1960), pp. 512-22.

Trenholm, M., and Milne, H. "Studies of Teenage Eating in Ontario. I. Evaluation of Teenage Food Selection," Canadian Journal of Public Health, LIV (October, 1963), pp. 455-462.

Wallace, J.M. "Health Education in the Training of Teachers," Health Education Journal, XX (January, 1962), pp. 9-15.

Reports

American Association for Health, Physical Education and Recreation. Preparing the Health Teacher. Washington, D.C.: The Association, 1961.

American Public Health Association. Report of the Commitee on Child Health Services for Children with Orthopedic Handicaps. New York: The Association, 1964.

Bauer, W.W., Dukelow, Donald A., and Hein, Fred V. (eds.). Physicians and Schools. Reports of the National Conferences on Physicians and Schools. Chicago: American Medical Association, 1947-1961.

Canadian Education Association. Class Size Standards and Practices in Canada. Toronto: The Association, 1960.

_____. The Present Status of Sex Education in Canadian Schools. Toronto: The Association, 1964.

_____. The Status and Role of School Psychologists in Canada. Toronto: The Association, 1964.

Canadian Public Health Association. Recommended Qualification Requirements and Minimum Salaries for Public Health Personnel in Canada. 5th rev.; Toronto: The Association, 1965.

Canadian Medical Association. Report of the Sub-Committee on Health Education in Schools of the Committee on Physical Education and Recreation to the General Council at the Ninety-Seventh Annual Meeting of the Canadian Medical Association, June 22-24, 1964.

Committee on School Health. American Academy of Pediatrics. School Health Policies. Evanston, Ill.: The Academy, 1959.

Conference on Handicapped Children in Michigan. Handicapped Children - Problems - Programs - Services in Michigan. Ann Arbor, Mich.: University of Michigan, Continued Education Series, No. 93, 1962.

Hampshire County Council Education Committee. A New Approach to Health Education in the Schools, Report of a Working Party. Hampshire County Council, January 1964.

Hastings, J.E.F., and Mosley W. Organized Community Health Services, Report of a study for the Royal Commission on Health Services. Ottawa: Queen's Printer, 1966.

International Council on Health, Physical Education and Recreation of W COTP. Amsterdam International Congress, July 28-30, 1960. Washington, D.C.: The Council, 1960.

Johns, Edward B. et al. School Health Education Evaluative Study, Los Angeles Area 1954-1959. Los Angeles: University of California, 1961.

Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Dukelow, A. Donald, and Hein, Fred S. (eds.). Health Appraisal of School Children. 2nd ed.; Washington, D.C.: National Education Association, 1957.

Laycock, S.R. Special Educational Facilities in Canada. Toronto: Canadian Conference on Children, 1960.

_____. Helping the Emotionally Disturbed Child in the School Setting. Supplement No. 26 to Canada's Mental Health, February, 1962.

_____. Promoting Mental Health in the School. Supplement No. 40 to Canada's Mental Health, March-April, 1964.

Los Angeles City Schools. Health Program in the Los Angeles City Schools 1954-1961. Los Angeles: Division of Educational Services, 1962.

Mc Creary, John F. Evaluation of Prenatal Programmes, Well Baby Clinics, Preschool Clinics, School Health Services, Mental Health Programmes, and Special Hospital Facilities for Children. Toronto: Canadian Conference on Children, 1960.

National Committee on School Health Policies. Suggested School Health Policies. 3rd ed.; Washington, D.C.: National Education Association and American Medical Association, 1963.

Price, Bronson. School Health Services: A Selective Review of Evaluative Studies. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1957.

School Health Education Study. Summary Report of a Nationwide Study of Health Instruction in the Public Schools 1961-1963. Washington, D.C.: The School Health Education Study, 1964.

_____. A Report on the School Health Education Study, September 25, 1965. Washington, D.C.: The School Health Education Study, 1965.

Veenker, C. Harold (ed.). Synthesis of Research in Selected Areas of Health Instruction. Washington, D.C.: National Education Association, 1963.

World Health Organization and United Nations Educational, Scientific, and Cultural Organization. A Study Guide on Teacher Preparation for Health Education. Geneva: World Health Organization, 1957.

World Health Organization. Teacher Preparation for Health Education. Technical Report No. 193. Geneva: World Health Organization, 1960.

Unpublished Material

British Columbia Medical Association, Subcommittee on School Health Education. Report of a Survey on School Instructional Health Programme. Revised September, 1964. (Mimeographed.)

Brown, Milton H., and Schwenger, Cope W. "Report on the Survey of the Programme of the Department of Public Health, Province of Nova Scotia, 1961." (Mimeographed.)

Cahoon, Margaret C. "An Analysis of Doctoral Dissertations on School Health from 1953-1962." Unpublished paper submitted in partial fulfillment of the requirements in Education D 773: Seminar in School Health Education, University of Michigan, July 31, 1963.

Canada. Department of National Health and Welfare. "Report of a Survey of Health Unit Services in Eight Provinces of Canada 1960." Ottawa: The Department, 1961. (Mimeographed.)

Committee on Public Health Practice. Report to the Executive Council of the Canadian Public Health Association on School Health Services, October 26, 1963. (Multilithed.)

Denver Board of Education. "Health Interests of Children, 1958." Denver: The Board, 1958 (Mimeographed.)

APPENDIX F

THE GUIDING PRINCIPLES AND CRITERIA

SOME SELECTED GUIDING PRINCIPLES AND CRITERIA FOR SCHOOL HEALTH PROGRAMMES IN CANADA

PART A

THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAMME

I. THE SCHOOL HEALTH PROGRAMME SHOULD PROVIDE FOR THE UNDERSTANDING, PROTECTION, PROMOTION, AND RESTORATION OF THE PHYSICAL, EMOTIONAL, AND SOCIAL HEALTH OF STUDENTS AND STAFF MEMBERS THROUGH HEALTHFUL SCHOOL LIVING, HEALTH EDUCATION, AND SCHOOL HEALTH SERVICES.

1. The school health programme should strengthen and supplement parental responsibility, and family medical and dental supervision.

2. The school health programme should be coordinated with the appropriate public health programmes, and with the entire educational programme.

3. The school health programme should be based on the expressed, observed and anticipated health needs, interests, attitudes, and practices of students.

4. The school health programmes should be organized and administered jointly by the provincial and local departments of education and departments of health.

5. Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation at the provincial and local levels.

6. School health policies and procedures should be determined jointly by departments of education and departments of health, should provide direction for the programme, should define the responsibilities of personnel, and should be interpreted to teachers and other school personnel, to related professional groups, and to parents.

7. There should be a planned programme of evaluation of the entire school health programme on a continuous basis.

PART B

HEALTHFUL SCHOOL LIVING

The Health of School Personnel

II. THE SELECTION OF HEALTHY SCHOOL PERSONNEL AND THE SUBSEQUENT ASSESSMENT, PROTECTION, AND PROMOTION OF THEIR HEALTH SHOULD BE FUNDAMENTAL TO THE PROVISION OF HEALTHFUL SCHOOL LIVING.

1. The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment, of a plan to provide pre-employment medical examinations; periodic medical examinations; and arrangements for all school personnel to participate in screening tests, and receive appropriate immunizations offered in the school health services.

2. Sick leave provisions should be liberal enough to encourage school personnel to remain home when ill.

3. An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill.

The Emotional and Social Environment

III. THE ENTIRE SCHOOL PROGRAMME SHOULD PROMOTE AN ENVIRONMENT FAVOURABLE TO THE EMOTIONAL AND SOCIAL HEALTH OF PUPILS AND STAFF MEMBERS.

4. The school should foster opportunities for the development of good interpersonal relationships among students, among staff members, between staff members and students, and between staff members and parents.

5. Teachers should plan their teaching to permit mastery of subject matter by each pupil at his own rate, and to provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear.

6. The teacher should understand home and community influences in order to work more effectively with pupils with specific health problems.

7. The pupil-teacher ratio should be small enough to permit individual attention to all pupils, and large enough for group activities.

8. Policies with regard to such matters as grade placement, grouping within the classroom, homework assignments, and reporting of pupil's progress, should be adapted to the individual needs and achievements of the pupils.

9. Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped.

10. Perfect or near-perfect attendance should not be over-emphasized since this tends to keep the sick child in school.

11. Pupils should be released from class on the request of the parent to keep selected medical and dental appointments.

The Physical Environment

IV. THE ENTIRE SCHOOL PLANT (CONSISTING OF SITE, BUILDINGS, AND EQUIPMENT), AND SERVICES SHOULD BE CONDUCIVE TO THE HEALTH AND SAFETY OF PUPILS AND STAFF MEMBERS.

12. In the selection of a school site consideration should be given to those factors likely to influence health and safety.

13. Construction and maintenance of school buildings should be in accordance with, or superior to, minimum required standards with regard to a safe water supply, safe drinking water, heating and ventilation, continual control of heating and ventilation, lighting and its control, lavatory and toilet facilities and supplies, and sanitary garbage and sewage disposal.

14. The medical officer of health, and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation, and safety on an annual basis.

15. When improvements are indicated as a result of such inspections the medical officer of health, and/or the public health inspector, should send a written report to the educational administrator and the local board of education, and meet with them to discuss the findings and assist in the planning of corrective action.

16. Seating should be adjusted regularly to meet the individual needs of the pupils.

17. Pupils should aid in the maintenance of the cleanliness and neatness of the classrooms, toilets, and lavatories.

Safety and Accident Prevention

18. The possibility of accidents and fires in schools should be minimized through design of the plant, provision of good equipment, inspection on a regular basis, proper maintenance, and a planned programme of fire and accident prevention.

19. Safety measures in physical education programmes, in laboratories, and in shops, should be given special attention through the provision of safe facilities, the use of the best protective equipment, instruction, careful supervision of the students, and the development of habits of safety.

20. Services of the municipal police and fire departments should be utilized in promoting safety.

21. Pupils should participate in the maintenance of standards of safety and fire prevention.

22. With regard to traffic safety, traffic problems in the school area should be controlled, in so far as possible, school zones should be clearly marked; and trained, adult traffic guards should be on duty at appropriate times in urban areas.

23. All school buses should meet, or exceed, legal minimum standards for the transportation of pupils; be maintained in safe operating condition; and be manned by bus drivers qualified for such driving, and in good physical and emotional health.

School Lunch Facilities and Service

V. WHEN PUPILS CANNOT RETURN HOME FOR LUNCH THE PROVISION OF SCHOOL LUNCH FACILITIES AND SERVICES SHOULD BE IMPORTANT PARTS OF HEALTHFUL SCHOOL LIVING, SHOULD CONTRIBUTE TO GOOD NUTRITION, AND SHOULD PROVIDE IMPORTANT LEARNING EXPERIENCES.

24. When students bring lunches there should be adequate storage facilities for the lunches, and a sanitary place to eat lunch.

25. School lunch rooms should be large enough to permit students to eat there whether they buy lunch or bring it from home.

26. Lavatories and toilets should be located near lunchrooms to promote handwashing before eating.

27. If food is prepared, cooked, and served in the school there should be required minimum standards with regard to the quality of the food; selection according to Canada's Food Guide; no carbonated beverages, chocolate milk, gum, or candy, for sale; an adequate quantity of food; storage of food; refrigeration; preparation; cooking; serving; dishwashing; and waste disposal.

28. The public health inspector should provide the same assistance to the lunchroom manager and staff, and the same degree of supervision, as to any other place preparing and serving food.

29. And adequate number and type of foodhandlers should be employed, instructed in sanitary foodhandling and personal health practices, and provided with lavatory and toilet facilities.

30. The school lunch facilities and services should be used for instruction of the students in foodhandling practices, food selection, and proper eating habits and social customs.

PART C

HEALTH EDUCATION

VI. HEALTH EDUCATION SHOULD UTILIZE AND PROVIDE LEARNING EXPERIENCES FOR THE PURPOSE OF FAVOURABLY INFLUENCING UNDERSTANDINGS, ATTITUDES, AND HABITS RELATED TO INDIVIDUAL, FAMILY, AND COMMUNITY HEALTH AND SAFETY.

1. Health instruction should permeate the entire curriculum and life of the school.

2. An individual, or group of individuals, with specific qualifications in health education should be delegated responsibility for the overall planning of health education within the school system, and within each school.

3. Curriculum planning should involve all individuals and groups likely to contribute to health instruction.

4. The major responsibility for health teaching in the elementary school should belong to the classroom teacher.

5. In junior high and high schools the major responsibility for health instruction should be delegated to teachers with special preparation in health education.

6. Each teacher, no matter what his subject area, should have concern for the individual health needs, interests, and health guidance of his pupils.

7. Professional health personnel should assist school personnel in determining health needs and objectives; in assessing the scientific accuracy of instructional content, and teaching materials; in curriculum development; in classroom teaching on occasion; in in-service educational programmes; and in parent education programmes.

8. Such professional health personnel should include staff members involved in the school health services, other staff members from the local department of health, and staff members from appropriate voluntary health agencies.

9. Systematically organized health instruction should be provided for all pupils in all grades.

10. Systematically organized health instruction should receive attention equal to that of any major part of the curriculum.

11. Health instruction should be correlated with instruction in other subject matter fields such as physical education, science, home economics, social studies, and driver education.

12. Informal, and more incidental, health teaching in relation to daily activities should supplement systematically organized health teaching.

13. Individual health guidance in relation to health needs and practices should supplement systematically organized health teaching.

14. The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:
    a) Growth, structure and functions of the human body.
    b) Consumer health education: the need for health care, the reliability of sources of health information, selection of health services and products, and local and provincial health and welfare services and programmes.
    c) Nutritional needs, good food habits, and desirable social practices and attitudes.
    d) Dental development and dental care.
    e) First aid procedures.
    f) Home nursing procedures.
    g) Safety practices for the prevention of, and protection from, accidents.
    h) Causes and prevention of important non-communicable diseases.
    i) Causes and prevention of important communicable diseases.
    j) Family living: Adolescent changes, the value of the family system, preparation for marriage and family life(in senior high grades), with recognition that the family has the primary responsibility for this teaching.
    k) The influence of heredity in relation to personal and community health problems.
    l) The influence of population increase in relation to personal and community health problems.
    m) Factors affecting mental and emotional health.
    n) Study of personality and adjustment.
    o) The nature of physical fitness, and the need for exercise, rest, and recreation to maintain it.
    p) Emotional, social, and physical health aspects of smoking, alcohol, drugs, and chemicals and toxins in the environment.
    q) Vocations and careers in the health sciences and applied fields.
    r) Developments in health research applicable to improvement of personal and community health practices.
    s) National and international health problems and programmes.

15. The objectives and methods of health teaching should stimulate active participation of the pupils in the learning experiences, and stress the use of health information.

16. Students should be afforded learning experiences through field trips to, and participation in the programmes of, community official and voluntary health agencies.

17. Up-to-date, authoritative, and accurate materials, and audio-visual aids, from a wide range of sources should be readily available to teachers and pupils.

18. The classroom space for health teaching should be comparable to that for other subjects, and adequate for the storage of models, charts, and experimental equipment.

19. There should be a planned programme for parent education and for community understanding of the school health programme provided by the school and the local department of health.

Professional Preparation and Continuing Education

VII. ALL PERSONNEL INVOLVED IN THE SCHOOL HEALTH PROGRAMME SHOULD BE ADEQUATELY PREPARED AND ENCOURAGED TO PARTICIPATE IN CONTINUING EDUCATION PROGRAMMES.

20. Specialized health personnel should be certified or licensed in their respective fields of competence; should be prepared in public health, should meet, or surpass, the minimum professional qualifications recommended by the provincial department of health; and should meet, or surpass, the minimum recommended qualifications of the Canadian Public Health Association.

21. Comprehensive preparation in school health and health education should be required of all prospective teachers to meet the minimum licensing requirements of the provincial department of education.

22. Special preparation for health teachers for junior high and senior high schools, in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include work in the biological sciences, in the social sciences, and in the physical sciences.

23. Special preparation for health teachers for junior and senior high schools should include professional health courses in teacher preparation in order to meet the minimum requirements of the provincial department of education for specialist standing.

24. All new professional health personnel to serve schools should become acquainted with the administrative and instructional programmes, and problems, of the schools through pre-service or orientation programmes.

25. All new administrators and teachers should become acquainted with the public health programmes, and problems, during pre-service or orientation programmes.

26. A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods.

27. More informal in-service learning experiences should be planned in relation to supervision, consultation, service on functional school and community health committees, and participation in health organizations.

28. In-service programmes should be provided for non-instructional school personnel such as foodhandlers, bus drivers, and custodians.

PART D

SCHOOL HEALTH SERVICES

VIII. SCHOOL HEALTH SERVICES SHOULD BE ORGANIZED TO PROTECT, PROMOTE, AND RESTORE THE HEALTH OF STUDENTS AND STAFF; TO ASSIST IN ADAPTING THE EDUCATIONAL PROGRAMMES TO THE MENTAL AND PHYSICAL ABILITIES, AND NEEDS OF PUPILS; AND TO UTILIZE FULLY THE COMMUNITY RESOURCES TO MEET THE HEALTH NEEDS OF CHILDREN AND YOUTH WITHOUT GAPS OR DUPLICATION OF FACILITIES AND SERVICES.

1. All school health service activities should provide positive learning experiences for the students, and should be utilized in health teaching.

2. School health services should make provisions to:
   a) Appraise the health status of pupils.
   b) Appraise the health status of staff members.
   c) Encourage and facilitate the correction of remediable defects.
   d) Assist the pupil to adjust to non-remediable defects.
   e) Counsel students.
   f) Counsel staff members.
   g) Counsel parents, through home visiting when indicated.
   h) Help prevent and control disease.
   i) Plan for the health supervision of school personnel.
   j) Plan for the emergency care of injured and severely ill students and for staff members.
   k) Assist in the identification of exceptional (handicapped) pupils.
   l) Assist in planning for the health supervision of exceptional pupils.
   m) Assist in adapting the school programme to meet the needs of exceptional pupils.
   n) Coordinate the community resources to meet the health needs of pupils.

3. Specialized health personnel should be available on an adequate time basis related to the needs of the students, the nature of the educational programme, and the community health problems.

4. Auxiliary personnel, such as the certified nursing assistant, the audiometric technician and the clerk, should be employed under the direct supervision of qualified professional health personnel to release the professional workers from tasks not requiring professional competencies.

5. The social worker should be introduced in an advisory capacity to professional health workers, educational administrators and teachers, as a member of the staff of the local department of health.

6. If the local board of education wants more extensive school health services than the local board of health can provide, it should contract with the local board of health for the purchase of additional services, rather than establish supplementary school health services.

Health Appraisals

7. Health appraisal procedures should include teachers' observations and referrals, screening tests, medical and dental examinations, psychological examinations, psychiatric examinations, utilization of cumulative health records, counseling, and follow-up procedures for students with suspected or known defects.

8. The classroom teacher should participate in the health appraisals in order to more clearly understand the health needs of pupils in relation to their performance.

9. Individual teacher-nurse conferences should be held regularly to discuss the teacher's health observations, and to share information about the health status of pupils including reports of screening procedures and examinations.

10. In schools where each pupil has a number of different teachers every day, the homeroom teacher should be recognized as having the responsibility for the daily health supervision, and guidance, of the pupils.

11. In large schools, a liaison committee, composed of such persons as the principal, vice-principal, school health physician, public health nurse, guidance director, physical and health education directors and other appropriate individuals, should function to facilitate exchange of information, and joint planning.

Screening Tests

12. Adequate preparation for screening tests should include preparation of pupils, teachers, and parents.

13. Vision screening tests should be provided with a lighted Snellen chart (and/or other methods approved by the provincial department of health); for all pupils referred by self, teacher, and/or parents; for all pupils at appropriate intervals; and should include colour vision screening once in an upper grade of the elementary school.

14. Hearing should be screened with a pure tone audiometer (and/or other methods approved by the provincial department of health);for all pupils referred by self, teacher, and/or parents with suspected hearing loss or speech defect; and for all pupils at appropriate intervals.

15. As part of the school health services, measurements of height and weight should be determined and recorded for only those pupils for whom surveillance of the growth pattern is indicated.

16. Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals.

17. All positive reactors to the tuberculin test should be given a chest x-ray at once, repeated at intervals depending upon the findings.

18. The introduction of other screening tests should be discussed with the local medical and/or dental society, and with appropriate voluntary health agencies.

Medical Examinations

19. The physician who attends the pupil regularly should be encouraged to do the routine medical examinations of the pupil.

20. A parent should be present at any medical examination of the young pupil whether in the school health services, physician's office, or clinic.

21. There should be plans for parental counseling with regard to the older pupil who may not want the parent present during the medical examination if the findings suggest the need for follow-up procedures.

22. The school health physician should examine routinely, or arrange for the examination of, only those pupils who are not able to obtain an examination from a private physician or clinic.

23. Referral medical examinations should be provided by the school health physician for those pupils referred by the public health nurse, teacher, and/or parent, with suspected or known liabilities not under medical supervision.

24. Medical examinations provided in the school health services should be of a quality to command medical respect, to provide sufficient information to guide counseling of pupils and parents, and to provide a desirable learning experience for the pupil.

Dental Health Services

25. The dental health services should be preventive and educational in nature.

26. If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries.

27. In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries.

28. School dental inspections should be utilized to estimate group dental needs, and to facilitate community planning to meet dental needs.

29. Pupils should be referred to the family dentist or dental clinic for routine dental examination and correction of dental defects.

30. If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately.

31. Dental emergencies that occur when the dental staff members are in the school should be given temporary, palliative treatment, if necessary, and referred to the family dentist or dental clinic.

Mental Health Services

32. Provisions for identifying, assessing, and securing help for students with emotional, social, and behaviour problems should include psychological examinations and evaluations, social evaluation of the pupil and his home, counseling pupil and parents, psychiatric examinations and assessments, and special class placements.

33. The services of child guidance clinics, and/or mental health clinics, should be available for any student in need of further assessment and therapy.

34. School health personnel should participate in the procedures of the child guidance clinics and mental health clinics, in referral, in preparation of the social evaluation (case history), in case conferences, and in follow-up procedures.

35. Reports of psychological and psychiatric examinations and assessment should be recorded on the school health record, should be interpreted to staff members, and should be discussed with the pupil and parents in terms of capabilities.

36. Periodic appraisal of mental health needs and services for pupils should be made through analysis of student drop-out rates, case studies, and consultation case loads.

Cumulative Health Records

37. Parents should be encouraged to provide information about the health history of the child and family during the school registration conference or preschool medical examination, and following any subsequent significant illness.

38. The cumulative health records should be filed in the school, and should accompany the pupil from grade to grade, and from school to school, with restrictions regarding the forwarding of certain confidential information.

39. Teachers should be encouraged to use the cumulative health records.

40. Teachers should have the opportunity to contribute significant information to these health records.

Counseling and follow-up Services

41. Counseling and follow-up procedures should involve pupils, parents, family physicians and dentists, and teachers and administrators.

42. Counseling and follow-up procedures should focus on the significance of appraisal findings, the need for further examination and/or treatment, the utilization of community resources to assist in the provision of needed assessment and/or treatment, and helping the pupil to accept responsibility for his own health.

43. There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings.

44. There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family.

45. Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others, should be coordinated.

46. The school health physician and the public health nurse should initiate follow-up stops to ensure necessary medical care for all pupils whose parents are unable to provide it.

47. The correction of defects should be appraised on an individual basis, and through periodic surveys of correction rates.

The Prevention, Detection and Control of Communicable Diseases

48. The school should contribute to the prevention, detection, and control of communicable diseases through application of policies and procedures determined jointly by the departments of health and departments of education; coordinated with those of appropriate voluntary health agencies; and interpreted to, and understood by, local physicians, and parents.

49. The local health department should provide each school with a list of reportable communicable diseases; a list of non-reportable communicable diseases; copies of official regulations concerning isolation, quarantine, and exclusion; and periodic reports on the prevalence and distribution of communicable diseases.

50. All school personnel should be instructed in the recognition of observable signs and symptoms of communicable diseases, and the specific measures for their control.

51. Levels of immunity against smallpox, diphtheria, tetanus, whooping cough, and poliomyelitis should be established in infancy and maintained in the preschool years so that the child enters school with protection against these diseases.

52. Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil.

53. The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health.

54. Pupils should be readmitted to school following reportable communicable disease only after official release from the local department of health.

55. School personnel should encourage parents to keep pupils at home when genuinely ill.

56. The school should cooperate in the execution of specific public health regulations and recommendations for the control of disease spread by insects and animals.

57. There should be a planned programme of tuberculosis prevention, detection, and control for all pupils, and for all school personnel.

Plans for the Provision of First Aid and Emergency Care

58. The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of, and periodic assessment of, a planned programme for first aid and emergency care.

59. The medical officer of health should provide a list of first aid supplies, advice regarding the location and upkeep of first aid kits, and a guide for first aid and emergency procedures.

60. The provision of emergency care and first aid for students and staff members should be primarily the responsibility of the school administration with the assistance of the professional health personnel, if in the school, at the time of a serious emergency.

61. School personnel should limit their first aid and emergency measures to those defined in the above-mentioned guide.

62. One person in each school should be responsible for first aid and emergency plans.

63. All teachers should have first aid preparation equivalent to the Red Cross Course or St. John Ambulance Course.

64. The first aid and emergency procedures should be interpreted to parents, and to local physicians and dentists (regarding dental emergencies).

65. Detailed information should be obtained from all staff members, and from parents for all pupils, at the beginning of each school year, to facilitate locating the parent or guardian, and using the physician and hospital of choice in an emergency.

66. The school plant should be planned, and specific procedures established, for the protection of pupils in the event of likely, or possible, natural types of disaster such as fire, flood, tornado or blizzard, striking the school community.

67. Each school should have an accident record form to be completed on every accident, and to be reviewed periodically in terms of accident prevention measures.

The Facilities for School Health Services

68. The school health room, or suite, should provide adequate space and facilities to administer the school health service carried on within the school.

69. This room, or suite, should be located so that it can be supervised by a member of the school staff when not under the supervision of a member of the professional health staff.

Provisions for Exceptional (Handicapped) Pupils

70. The local medical officer of health, or the school health physician, should provide medical consultation to the educational administrator and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils.

71. The school health programme for exceptional pupils should be more comprehensive than for other pupils, and should pay particular attention to their emotional and social adjustment.

72. There should be appropriate adaptations of the school programme, the school building, and the teaching facilities to meet the health needs of some of the exceptional pupils.

73. There should be provisions for exceptional pupils in the regular classroom, in special classes, and in special schools.

APPENDIX G

SUPPLEMENTARY TABLES ON SOME CHARACTERISTICS OF THE RESPONDENTS

TABLE 45

COUNTRIES IN WHICH THE RESPONDENTS OBTAINED THEIR EDUCATION*

Country	Educators	Public Health Workers	Total
	No.	No.	No.
Canada	50	70	120
United States of America	16	29	45
Great Britain	2	6	8
Other	0	5	5

*Some respondents had part of their education in more than one country.

TABLE 46

SEX OF RESPONDENTS

Profession	Male		Female	
	No.	Pct.	No.	Pct.
Educators	37	54	15	26
Public Health Workers	32	46	42	74
	69	100	57	100

TABLE 47

THE TYPES OF THE RESPONDENTS' PRESENT POSITIONS IN PUBLIC HEALTH

Type of Position	No.	Pct.
Official public health, staff, local	1	1
Official public health, administrative, local	32	44
Official public health, provincial	19	26
Official public health, national	2	3
Voluntary public health, local	1	1
Voluntary public health, provincial	1	1
Voluntary public health, national	1	1
College or university teaching	15	20
Other	2	3
Total	74	100

TABLE 48

THE SPECIFIC PROFESSIONAL ORIENTATION OF THE PUBLIC HEALTH RESPONDENTS

Specific Professional Orientation	No.	Pct.
Physician	34	46
Public Health Nurse	24	33
Health Educator	10	14
Dentist	4	5
Nutritionist	1	1
Public Health Inspector	1	1
Total	74	100

TABLE 49

THE TYPES OF THE RESPONDENTS' PRESENT POSITIONS IN EDUCATION

Type of Position	No.	Pct.
Elementary school principal	5	10
Elementary school teacher	3	6
High school principal	1	2
Specialist health teacher	1	2
Urban supervisor or consultant	6	11
Educational administrator	1	2
Provincial consultant or director	15	29
College or university professor	19	36
Other	1	2
Total	52	100

TABLE 50

THE REPORT OF THE RESEARCH OF 44 RESPONDENTS ON, OR RELATED TO, SCHOOL HEALTH

Number of Studies	Educators No.	Public Health Workers No.	Total No.
One study completed	7	11	18
Two to five studies completed	2	9	11
More than five studies completed	0	1	1
Research in progress	5	3	8
Other	0	9	9
No studies	39	43	82

*Each respondent could report more than one category.

TABLE 51

THE REPORT OF THE PUBLICATIONS OF 44 RESPONDENTS ON, OR RELATED TO SCHOOL HEALTH

Number and Type of Publication	Educators No.	Public Health Workers No.	Total No.
Only one article or report	4	7	11
More than one article or report	10	15	25
Pamphlets	1	2	3
One or more books	7	4	11
Contributor to books	0	1	1
Policy or procedural manuals	0	5	5
Editor	0	2	2
No publications	37	47	84

*Each respondent could report more than one category.

TABLE 52

THE REPORT OF THE COMMITTEE RESPONSIBILITIES OF 88 RESPONDENTS ON, OR RELATED TO SCHOOL HEALTH

Type of Committee	Educators No.	Public Health Workers No.	Total No.
Curriculum committees	17	20	37
Policy or advisory committees	7	4	11
Medical society committees	3	3	6
Other school health committees	14	18	32
Other committees related to school health	10	19	29
Other committees with secondary interest in school health	3	5	8
No committees	14	24	38

*A few respondents reported more than one category.

TABLE 53

THE REPORT OF THE TEACHING RESPONSIBILITIES OF 78 RESPONDENTS

Type of Teaching	Educators No.	Public Health Workers No.	Total No.
Full-time teaching appointment	23	15	38
Regular part-time teaching appointment	2	16	18
Occasional part-time teaching appointment	9	16	25
Occasional participation in teaching	7	12	19
No teaching responsibilities	18	30	48

APPENDIX H

THE PERCENTAGES OF THE "DEFINITELY APPLICABLE" JUDGMENTS OF THE RESPONDENTS ON THE GUIDING PRINCIPLES AND CRITERIA ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND THE RANGE OF INVOLVEMENT

TABLE 54

THE PERCENTAGES OF "DEFINITELY APPLICABLE" JUDGMENTS ON CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM (PART A) ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT OF THE RESPONDENTS

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr. I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The school health programme should strengthen and supplement:											
a) Parental responsibility.	94	92	95	96	90	95	87	95	95	98	92
b) Family medical and dental supervision. (1)	84	81	86	68	87	90	67	84	88	80	86
The school health programme should be coordinated with:											
a) The appropriate public health programmes.	90	83	95	82	87	95	80	88	92	93	88
b) The entire educational programme. (2)	79	87	74	79	87	75	87	81	76	88	79
The school health programme should be based on:											
a) The expressed, observed, and anticipated health needs of students.	92	92	92	93	90	93	93	95	89	95	91
b) The health interests of students.	49	50	49	61	49	44	53	47	50	54	47
c) The health attitudes of students.	47	50	45	50	51	42	53	44	47	41	49
d) The health practices of students. (3)	55	60	51	54	59	53	67	49	58	59	53
The school health programme should be organized and administered jointly by the provincial and local departments of education and departments of health. (4)	53	54	53	43	56	56	67	44	55	51	54
Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation:											
a) At the provincial level.	77	67	84	71	67	86	80	74	79	83	74
b) At the local level. (5)	73	67	77	71	64	80	80	77	70	83	68
School health policies and procedures should:											
a) Be determined jointly by the departments of education and departments of health.	72	69	74	71	72	73	73	65	76	68	74
b) Provide direction for the programme.	82	77	85	86	77	83	73	88	80	88	79

TABLE 54 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
c) Define the responsibilities of Personnel.	76	73	78	82	74	75	73	77	76	83	73
d) Be interpreted to teachers and other school personnel.	95	94	96	100	92	95	93	98	94	93	96
e) Be interpreted to related professional groups.	83	77	88	75	79	90	80	81	85	80	85
f) Be interpreted to parents.(6)	89	88	89	89	90	88	87	88	89	83	92
There should be a planned programme of evaluation of the entire school health programme:											
a) On a continuous basis.	52	54	50	64	51	46	47	56	52	59	48
b) On a periodic basis. (7)	47	37	54	32	41	58	60	44	47	41	49
(Number of respondents)	(126)	(52)	74)	(28)	(39)	(59)	(15)	(43)	(66)	(41)	(85)

TABLE 55

THE PERCENTAGES OF "DEFINITELY APPLICABLE" JUDGMENTS ON CRITERIA FOR HEALTHFUL SCHOOL LIVING (PART B) ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT OF THE RESPONDENTS

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The Health of School Personnel											
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide:											
a) Pre-employment medical examinations.	72	69	74	71	74	70	80	65	75	88	64
b) Periodic medical examinations											
c) Arrangements for all school personnel to participate in screening tests offered in the school health services.	64	62	65	61	67	63	67	58	66	60	65
d) Arrangements for all school personnel to receive appropriate immunizations offered in the school health services. (1)	74	83	68	79	85	65	73	67	78	75	74
Sick leave provisions should be liberal enough to encourage school personnel to remain home when ill. (2)	87	90	85	79	90	89	87	91	84	92	85
An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill. (3)	84	85	83	71	85	89	93	84	81	90	81
The Emotional and Social Environment											
The school should foster opportunities for the development of good interpersonal relationships:											
a) Among students.	90	96	85	82	97	88	93	88	89	88	90
b) Among staff members.	85	90	82	71	92	88	80	84	88	82	87

TABLE 55 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
c) Between staff members and students.	85	87	85	82	87	86	80	84	88	88	85
d) Between staff members and parents. (4)	85	87	80	79	90	84	87	81	86	85	85
Teachers should plan their teaching:											
a) To permit mastery of subject matter by each pupil at his own rate.	69	79	61	46	87	67	80	63	69	62	71
b) To provide successful experiences for each pupil without excessive competition, fatigue, undue worry or fear.(5)	77	85	71	64	87	75	87	72	77	70	80
The teacher should understand home and community influences in order to work effectively with pupils with specific health problems. (6)	90	96	85	75	100	89	93	88	89	90	89
The pupil-teacher ratio should be:											
a) Small enough to permit individual attention to all pupils.	75	79	72	68	82	74	73	72	78	78	74
b) Large enough for group activities. (7)	78	87	72	71	90	74	73	79	78	82	76
Policies should be adapted to individual needs and achievements of pupils with regard to such matter as:											
a) Grade placement.	75	77	74	64	85	74	73	72	77	70	77
b) Grouping within the classroom.	73	75	71	61	82	72	73	72	72	62	77
c) Homework assignments.	69	79	62	64	85	61	60	63	75	65	71
d) Reporting of pupil's progress.(8)	77	85	71	75	90	68	80	74	77	72	79
Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped (9)	92	92	92	82	95	95	100	93	89	95	90
Perfect or near-perfect attendance should not be over-emphasized since this tends to keep the sick child in school.(10)	69	73	67	75	72	65	60	58	78	70	69
Pupils should be released from class on the request of the parent to keep selected medical and dental appointments.(11)	76	69	81	72	77	77	80	60	86	65	81

TABLE 55 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The Physical Environment											
In the selection of a school site consideration should be given to those factors likely to influence health and safety. (12)	97	96	97	96	97	96	100	95	98	92	99
Construction and maintenance of school buildings should be in accordance with, or superior to, minimum required standards with regard to:											
a) A safe water supply.	98	98	100	96	100	100	100	98	100	98	100
b) Safe drinking water.	98	98	99	96	100	98	100	98	98	95	100
c) Heating and ventilation.	99	98	100	96	100	100	100	98	100	98	100
d) Continual control of heating and ventilation.	97	94	99	93	97	98	100	95	97	90	100
e) Lighting and its control.	99	98	100	96	100	100	100	98	100	98	100
f) Lavatory and toilet facilities and supplies.	99	98	100	96	100	100	100	98	100	98	100
g) Sanitary garbage and sewage disposal. (13)	99	98	100	96	100	100	100	98	100	98	100
The medical officer of health, and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation, and safety:											
a) On an annual basis,	81	71	89	79	69	91	73	81	83	82	81
b) Less frequently unless requested. (14)	8	12	6	7	13	5	7	12	6	10	7
When improvements are indicated as a result of such inspections the medical officer of health, and/or the public health inspector, should:											
a) Send a written report to the educational administrator and the local board of education,	83	77	88	86	77	86	73	88	83	82	83
b) Meet with the educational administrator and the local board of education to discuss the findings and assist in the planning of corrective action. (15)	73	73	74	71	74	74	73	67	78	65	77

TABLE 55 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Seating should be adjusted regularly to meet the individual needs of the pupils. (16)	83	79	86	82	77	88	73	74	92	82	83
Pupils should aid in the maintenance of the cleanliness and neatness of:											
a) Classrooms.	83	88	79	82	87	81	73	84	88	85	82
b) Toilets and lavatories.(17)	77	79	76	79	79	75	73	70	84	78	77
Safety and Accident Prevention											
The possibility of accidents and fires in schools should be minimized through:											
a) Design of the plant	98	98	99	93	100	100	93	98	100	100	98
b) Provision of good equipment.	98	98	99	93	100	100	93	98	100	100	98
c) Inspection of a regular basis.	95	90	99	89	95	98	93	93	98	98	94
d) Proper maintenance.	99	98	100	96	100	100	100	98	100	100	99
e) A planned programme of fire and accident prevention. (18)	96	92	99	89	97	98	100	88	100	95	96
Safety measures in physical education programmes, in laboratories, and in shops, should be given special attention through:											
a) The provision of safe facilities	98	100	97	96	100	98	93	100	98	98	99
b) The use of the best protective equipment	98	98	97	100	97	96	100	95	98	98	98
c) Instruction	98	96	99	93	100	98	100	95	98	92	100
d) Careful supervision of the students.	96	96	96	96	95	96	87	95	98	95	96
e) Development of habits of safety.(19)	98	98	99	96	100	98	100	98	98	95	100
In promoting safety, the services of the following municipal departments should be utilized:											
a) The police department	83	85	82	82	87	81	80	79	86	80	85
b) The fire department.(20)	85	85	86	86	87	84	80	81	89	80	88
Pupils should participate in the maintenance of standards of safety and fire prevention. (21)	93	92	93	93	92	93	93	91	94	85	96

TABLE 55 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
With regard to traffic safety:											
a) Traffic problems in the school area should be controlled in so far as possible.	94	96	92	93	95	93	93	93	94	95	93
b) School zones should be clearly marked.	98	98	99	100	97	98	100	98	98	95	100
c) Trained traffic guards, on duty at appropriate times in urban areas, should be:											
i) Students	31	38	26	57	31	19	20	37	31	48	24
ii) Adults. (22)	48	48	49	32	56	51	53	42	52	38	54
All school buses should:											
a) Meet, or exceed, legal minimum standards for the transportation of pupils.	98	100	97	96	100	98	100	98	98	95	100
b) Be maintained in safe operating condition.	99	100	99	96	100	100	100	98	100	98	100
c) Be manned by bus drivers qualified for such driving.	99	100	99	96	100	100	100	98	100	98	100
d) Be manned by bus drivers in good physical and mental health.(23)	97	100	94	96	100	95	100	95	97	92	99
School Lunch Facilities and Services											
When students bring lunches there should be:											
a) Adequate storage facilities for the lunches.	90	94	88	93	95	86	100	88	89	92	89
b) A sanitary place to eat lunch.(24)	96	96	96	96	95	96	100	98	94	92	98
School lunch rooms should be large enough to permit students to eat there whether they buy lunch or bring it from home. (25)	93	88	96	100	85	95	93	93	92	92	93
Lavatories and toilets should be located near lunchrooms to promote handwashing before eating. (26)	77	77	76	71	77	79	93	77	72	80	75
If food is prepared, cooked and served in the school there should be minimum standards with respect to:											

TABLE 55 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
a) The quality of the food.	98	98	97	100	97	97	93	98	98	95	99
b) Selection according to Canada's Food Guide.	89	85	92	89	82	93	87	95	86	92	87
c) No carbonated beverages, chocolate milk, gum or candy for sale.	69	65	72	64	67	74	73	63	75	62	73
d) An adequate quantity of food.	95	92	97	93	92	98	93	95	95	90	98
e) Storage of Food.	98	96	100	96	97	100	100	98	98	98	99
f) Refrigeration.	98	94	100	96	95	100	100	98	98	98	98
g) Preparation.	98	94	100	96	95	100	100	95	100	98	98
h) Cooking.	96	92	99	96	92	98	100	93	98	95	96
i) Serving.	96	90	100	96	90	100	100	93	98	98	95
j) Dishwashing.	98	94	100	96	95	100	100	95	98	98	98
k) Waste disposal. (27)	98	96	100	96	97	100	100	95	100	98	99
The public health inspector should provide the same assistance to the lunchroom manager and staff, and the same degree of supervision, as to any other place preparing and serving food.(28)	97	96	97	93	100	96	93	93	100	92	99
An adequate number and type of foodhandlers should be employed. (29a)	97	96	97	93	97	98	100	95	97	98	96
All foodhandlers should be instructed in sanitary foodhandling and personal health practices. (29b)	98	94	100	96	95	100	93	100	98	100	96
Toilet and lavatory facilities should be provided for foodhandlers.(29c)	94	88	99	96	87	98	100	93	95	100	92
School lunch facilities and services should be used for instruction of the student in:											
a) Foodhandling practices.	69	71	68	75	67	68	60	67	72	70	69
b) Food selection.	73	71	74	79	69	72	80	65	75	75	71
c) Proper eating habits and social customs. (30)	72	69	74	75	69	72	80	63	75	68	74
(Number of respondents)	(124)	(52)	(72)	(28)	(39)	(57)	(15)	(43)	(64)	(40)	(84)

TABLE 56

THE PERCENTAGES OF "DEFINITELY APPLICABLE" JUDGMENTS OF CRITERIA FOR HEALTH EDUCATION (PART C) ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT OF THE RESPONDENTS

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Health instruction should permeate the entire curriculum and life of the school.(1)	74	71	76	82	69	74	60	77	77	72	75
An individual, or group of individuals, with specific qualifications in health education should be delegated responsibility for the overall planning of health education:											
a) Within the school system	81	83	79	71	85	82	87	79	80	85	79
b) Within each school. (2)	45	63	32	61	56	30	40	42	48	55	40
Curriculum planning should involve all individuals and groups likely to contribute to health instruction. (3)	79	71	85	79	72	84	87	84	75	80	79
The major responsibility for health teaching in the elementary school should belong to:											
a) The classroom teacher.	54	50	57	61	41	60	60	51	55	52	55
b) The classroom teacher assisted by a consultant in health education.	55	54	56	54	59	53	67	56	53	55	55
c) A specialist teacher in health education. (4)	18	25	12	14	31	11	47	16	12	18	18
In junior high and high schools the major responsibility for health instruction should be delegated to teachers with special preparation in health education.(5)	78	81	76	82	82	77	93	77	77	82	76
Each teacher, no matter what his subject area, should have concern for the individual health needs, interests, and health guidance of his pupils. (6)	93	94	92	89	95	93	93	93	92	85	96
Professional health personnel should assist school personnel in:											
a) Determining health needs and objectives.	88	83	92	79	87	93	80	96	91	88	88

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
b) Assessing the scientific accuracy of instructional content and teaching materials.	88	85	90	86	87	89	100	79	92	88	88
c) Curriculum development.	76	75	76	68	79	77	93	72	75	75	76
d) Classroom teaching on occasion.	55	54	56	46	59	56	60	56	55	58	54
e) In-Service education programmes	74	73	75	75	74	74	80	70	77	82	70
f) Parent education programmes.(7)	72	73	74	71	74	74	73	70	77	82	69
Such professional health personnel should include:											
a) Staff members involved in the school health services	88	83	92	96	79	89	87	86	91	90	87
b) Other staff members from the local department of health.	73	73	74	79	74	70	73	81	67	70	75
c) Staff members from appropriate voluntary health agencies. (8)	60	60	60	61	59	60	60	60	59	65	57
Systematically organized health instruction should be provided for all pupils in all grades.(9)	75	69	79	75	64	82	87	74	75	62	82
Systematically organized health instruction should receive attention equal to that of any major part of the curriculum.(10)	65	58	69	68	56	68	67	63	67	62	66
Health instruction should be correlated with instruction in other subject matter fields such as:											
a) Physical education.	92	90	93	96	90	91	100	93	89	90	93
b) Science.	81	75	86	79	77	86	93	79	80	78	83
c) Home economics.	86	81	90	89	82	88	87	86	86	82	88
d) Social studies.	77	69	82	86	67	79	80	79	73	70	80
e) Driver education. (11)	69	54	79	75	51	77	67	65	70	65	70

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr. I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Informal and more incidental health teaching in relation to daily activities should supplement systematically organized health teaching. (12)	83	83	83	96	79	79	80	77	89	82	80
Individual health guidance in relation to health needs and practices should supplement systematically organized health teaching. (13)	82	83	82	86	82	81	80	77	88	82	82
The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:											
a) Growth, structure and functions of the human body.	94	92	96	89	95	96	100	93	95	95	94
b) Consumer health education:											
i) The need for health care.	92	88	94	96	87	93	93	93	91	90	93
ii) The reliability of sources of health information.	88	83	92	89	80	93	100	88	86	90	87
iii) Selection of health services and products.	86	81	90	89	80	89	87	86	86	88	86
iv) Local and provincial health and welfare services and programmes.	80	73	85	86	72	82	87	77	80	82	79
c) Nutritional needs, good food habits, and desirable social practices and attitudes.	95	92	97	93	92	98	87	98	95	93	91
d) Dental development and dental care.	95	94	96	93	97	95	100	95	94	92	96
e) First aid procedures.	87	87	88	86	90	86	100	86	84	90	86
f) Home nursing procedures.	70	67	72	71	69	70	73	74	66	75	68
g) Safety practices for the prevention of, and protection from, accidents.	92	88	94	93	90	93	93	93	91	90	93
h) Causes and prevention of important non-communicable diseases.	79	79	79	79	79	79	87	77	80	70	83
i) Causes and prevention of important communicable diseases.	88	87	89	89	85	89	93	86	89	85	89
j) Family living:											
i) Adolescent changes.	93	88	96	89	92	95	100	95	91	90	94
ii) The value of the family system	82	75	88	71	79	89	93	84	80	80	83
iii) Preparation for marriage and family life (in senior high grades).	85	83	86	82	85	86	93	91	80	80	87

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr. I	Gr.II
	Pct	Pct.	Pct.	Pct	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
iv) Recognition that the family has the primary responsibility for this teaching.	80	75	83	79	74	84	80	81	81	78	81
k) The influence of heredity in relation to personal and community health problems.	68	63	71	68	64	70	60	70	70	80	62
l) The influence of population increase in relation to personal and community health problems.	72	63	78	75	59	79	80	67	75	82	67
m) Factors affecting mental and emotional health.	82	87	79	79	87	81	87	84	83	85	81
n) Study of personality and adjustment.	73	77	69	71	77	70	80	70	75	75	71
o) The nature of physical fitness and the need for exercise, rest and recreation to maintain it.	93	94	92	96	95	89	100	93	91	88	95
p) Emotional, social, and physical health aspects of:											
i) Smoking.	97	96	97	96	97	96	100	98	95	92	99
ii) Alcohol.	95	94	96	96	95	95	100	98	92	92	96
iii) Drugs.	90	88	92	86	90	93	100	93	88	85	93
iv) Chemicals and toxins in the environment.	84	83	85	75	85	88	93	84	84	85	83
q) Vocations and careers in the health sciences and applied fields.	66	52	76	71	46	77	80	58	69	68	65
r) Developments in health research applicable to improvement of personal and community health practices.	60	52	65	68	49	63	67	60	59	65	57
s) National and international health problems and programmes. (14)	66	54	75	71	49	75	67	65	67	70	64
The objectives and methods of health teaching should:											
a) Stimulate active participation of the pupils in the learning experiences.	94	94	94	93	95	95	100	100	89	92	95
b) Stress the use of health information.(15)	85	85	85	86	85	84	73	84	88	85	85
Students should be afforded learning experiences through:											

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
a) Field trips to community official and voluntary health agencies.	56	60	53	54	64	51	67	44	59	58	55
b) Participation in the programmes of community official and voluntary health agencies. (16)	46	44	47	39	51	46	60	40	45	52	43
Up-to-date, authoritative, and accurate materials and audio-visual aids from a wide range of sources should be readily available to teachers and pupils. (17)	98	94	100	96	95	100	100	98	97	98	98
The classroom space for health teaching should be:											
a) Comparable to that for other subjects.	88	87	89	89	82	91	87	93	88	92	85
b) Adequate for the storage of models, charts, and experimental equipment. (18)	91	96	88	89	95	89	87	95	89	90	90
There should be a planned programme for parent education and for community understanding of the school health programme provided by:											
a) The school.	29	27	31	29	28	30	47	26	28	28	30
b) The school and the local department of health. (19)	69	60	75	75	56	74	67	67	70	85	61
Professional Preparation and Continuing Education											
Specialized health personnel should:											
a) Be certified or licensed in their respective fields of competence.	88	88	88	82	90	89	87	88	88	90	87
b) Be prepared in public health.	66	60	71	61	62	72	40	56	80	68	65
c) Meet or surpass, the minimum professional qualifications recommended by the provincial department of health.	78	69	85	68	77	84	80	67	84	75	80
d) Meet, or surpass, the minimum recommended qualifications of the Canadian Public Health Association.(20)	71	62	78	61	67	79	53	63	80	72	70

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr. I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Comprehensive preparation in school health and health education should be required of all prespective teachers to meet the minimum licensing requirements of the provincial department of education. (21)	73	63	81	75	59	82	60	74	77	82	69
Special preparation for health teachers for junior high and senior high school, in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include:											
a) Work in the biological sciences.	89	99	89	93	85	89	87	88	91	95	86
b) Work in the social sciences.	90	87	93	93	82	95	87	93	91	88	92
c) Work in the physical sciences. (22)	74	67	79	86	59	79	80	70	77	72	75
Special preparation for health teachers for junior and senior high schools should include professional health courses in teacher preparation in order to meet the minimum requirements of the provincial department of education for specialist standing. (23)	85	83	86	82	82	88	80	86	84	85	85
All new professional health personnel to serve schools should become acquainted with the administrative and instructional programmes, and problems, of the schools through pre-service or orientation programmes. (24)	84	90	79	86	87	81	73	84	86	90	81
All new administrators and teachers should become acquainted with the public health programmes, and problems, during pre-service or orientation programmes. (25)	79	77	81	82	74	81	73	77	83	82	77
A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. (26)	79	77	82	89	69	82	80	81	81	90	75

TABLE 56 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
More informal in-service learning experiences should be planned in relation to:											
a) Supervision.	56	50	60	61	46	60	53	47	64	65	51
b) Consultation.	65	62	68	75	56	67	67	63	67	75	61
c) Service on functional school and community health committees.	56	48	62	71	44	58	67	47	61	60	55
d) Participation in health organizations.(27)	56	48	61	68	46	56	60	49	59	62	52
In-service programmes should be provided for non-instructional school personnel such as:											
a) Foodhandlers.	71	58	81	75	54	81	67	72	73	82	65
b) Bus drivers.	68	62	72	71	56	74	67	65	70	75	64
c) Custodians. (28)	67	60	72	71	56	72	60	63	72	72	64
(Number of respondents)	(124)	(52)	(72)	(28)	(39)	(57)	(15)	(43)	(64)	(40)	(84)

TABLE 57

THE PERCENTAGES OF "DEFINITELY APPLICABLE" JUDGMENTS ON CRITERIA FOR SCHOOL HEALTH SERVICES (PART D) ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT OF THE RESPONDENTS.

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
All school health service activities should:											
a) Provide positive learning experiences for the student	83	84	82	78	86	83	86	76	86	82	83
b) Be utilized in health teaching. (1)	79	78	79	67	81	83	86	74	80	82	77
School health services should make provisions to:											
a) Appraise the health status of pupils.	87	90	85	81	92	86	93	88	85	92	84
b) Appraise the health status of staff members.	51	59	45	63	57	41	64	50	49	62	45
c) Encourage and facilitate the correction of remediable defects.	93	94	93	85	95	97	100	93	92	100	90
d) Assist the pupil to adjust to non-remediable defects.	93	90	96	85	92	98	93	93	94	100	90
e) Counsel students.	87	78	93	81	81	93	100	88	83	90	85
f) Counsel staff members	57	57	56	63	59	52	57	50	60	60	55
g) Counsel parents, through home visiting when indicated.	89	80	96	78	86	97	100	83	91	82	93
h) Help prevent and control disease.	94	92	96	78	97	100	100	95	92	92	95
i) Plan for the health supervision of school personnel.	58	57	59	48	62	60	64	62	54	68	54
j) Plan for the emergency care of injured and severely ill students and staff members.	84	88	84	85	86	83	93	76	89	88	83
k) Assist in the identification of exceptional (handicapped) pupils.	93	90	96	89	89	92	100	95	91	95	93
l) Assist in planning for the health supervision of exceptional (handicapped) pupils.	90	88	92	81	92	93	100	86	91	90	90
m) Assist in adapting the school programme to meet the needs of exceptional (handicapped) pupils.	89	88	89	78	92	91	79	90	89	90	88
n) Coordinate the community resources to meet the health needs of pupils. (2)	80	76	84	70	78	86	93	81	78	80	80
Specialized health personnel should be available on an adequate time basis related to:											
a) The needs of the students.	87	86	88	85	86	88	93	81	89	95	83
b) The nature of the educational programme.	75	78	73	70	78	74	86	71	74	78	73

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
c) The community health problems.(3)	81	76	85	85	76	83	100	79	78	80	82
Auxiliary personnel, such as the certified nursing assistant, the audiometric technician and the clerk, should be employed under the direct supervision of qualified professional health personnel to release the professional worker from tasks not requiring professional competencies.(4)	80	71	86	67	76	90	86	76	82	75	83
The social worker should be introduced:											
a) In an advisory capacity to professional health workers, educational administrators and teachers.	58	57	59	67	51	59	86	52	57	55	60
b) As a member of the staff of the local department of health. (5)	39	35	42	22	38	48	36	45	37	32	43
If the local board of education wants more extensive school health services than the local board of health can provide, it should											
a) Contract with the local board of health for the purchase of additional services.	57	47	63	48	51	64	57	50	62	52	59
b) Establish supplementary school health services. (6)	20	33	11	30	35	5	29	21	17	18	21
Health Appraisals											
Health appraisal procedures should include:											
a) Teachers' observations and referrals.	97	98	96	100	97	95	86	100	97	98	96
b) Screening Tests.	89	84	93	93	84	91	93	90	88	92	88
c) Medical and dental examinations.	81	92	74	81	95	72	86	79	82	90	77
d) Psychological examinations.	62	59	64	56	65	64	71	62	62	78	55
e) Psychiatric examinations.	49	47	51	48	46	52	64	43	51	55	46
f) Utilization of cumulative health records.	95	94	96	85	97	98	100	95	94	92	96
g) Counseling.	89	86	90	89	86	90	100	86	88	82	91
h) Follow-up procedures for students with suspected or known defects.(7)	93	88	97	89	89	98	100	90	94	95	93

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The classroom teacher should participate in the health appraisals in order to more clearly understand the health needs of pupils in relation to their performance. (8)	74	80	70	63	86	71	93	64	75	70	76
Individual teacher-nurse conferences should be held regularly:											
a) To discuss the teacher's health observations.	81	61	95	81	59	95	86	76	83	82	80
b) To share information about the health status of pupils including reports of screening procedures and examinations. (9)	87	80	92	81	81	93	100	83	86	88	87
In schools where each pupil has a number of different teachers every day, the homeroom teacher should be recognized as having responsibility for the daily health supervision, and guidance, of the pupils. (10)	70	63	75	67	65	76	79	67	71	72	70
In large schools, a liaison committee, composed of such persons as the principal, vice-principal, school health physician, public health nurse, guidance director, physical and health education directors and other appropriate individuals, should function to facilitate:											
a) Exchange of information	84	84	84	81	84	84	100	81	82	82	84
b) Joint Planning. (11)	88	88	88	85	89	88	100	83	88	85	89
Screening Tests											
Adequate preparation for screening tests should include preparation of:											
a) Pupils	93	88	96	89	89	97	100	86	95	95	91
b) Teachers	93	90	96	89	92	98	93	88	97	95	93
c) Parents. (12)	84	76	90	85	76	90	86	81	88	82	85

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr. II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Vision screening tests should be provided:											
a) With a lighted Snellen chart (and/or other methods approved by the provincial department of health).	91	84	96	93	81	97	93	86	95	92	90
b) For all pupils referred by self, teacher, and/or parents	89	84	93	93	81	93	93	83	92	85	91
c) For all pupils at appropriate intervals.	90	86	93	85	84	97	93	90	89	92	89
d) Including colour vision screening once in an upper grade of the elementary school.(13)	78	78	78	74	81	78	86	71	80	80	77
Hearing should be screened:											
a) With a pure tone audiometer (and/or other methods approved by the provincial department of health).	92	84	97	81	86	100	100	88	92	98	89
b) For all pupils referred by self, teacher, and/or parent with suspected hearing loss or speech defect.	89	82	93	85	84	93	93	86	89	88	89
c) For all pupils at appropriate intervals. (14)	84	78	88	78	81	88	86	83	83	90	80
As part of the school health services, measurements of height and weight should be determined and recorded:											
a) For all pupils two or three times a year.	16	18	14	15	22	12	43	19	8	15	16
b) For only those pupils for whom surveillance of the growth pattern is indicated. (15)	61	45	73	56	46	74	50	62	65	58	63
Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals.(16)	89	90	89	78	89	95	93	83	92	92	88

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
All positive reactors to the tuberculin tests should be given a chest x-ray at once, repeated at intervals dependent upon the findings. (17)	90	86	93	81	89	95	100	83	92	85	93
The introduction of other screening tests should be discussed with:											
a) The local medical and/or dental society.	81	69	89	74	70	91	93	86	75	82	80
b) Appropriate voluntary health agencies. (18)	57	55	58	63	51	57	57	62	52	55	57
Medical Examinations.											
The physician who attends the pupil regularly should be encouraged to do the routine medical examinations of the pupil. (19)	80	69	88	76	68	90	79	76	83	80	80
A parent should be present at any medical examination of the young pupil whether in the school health services, physician's office, or clinic.(20)	70	51	82	59	49	88	50	71	73	70	70
There should be plans for parental counseling with regard to the older pupil who may not want the parent present during the medical examination if the findings suggest the need for follow-up procedures.(21)	76	67	82	67	68	86	79	74	77	82	73
The school health physician should examine routinely, or arrange for the examination of, only those pupils who are not able to obtain an examination from a private physician or clinic.(22)	61	51	67	44	57	71	79	67	52	58	62

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Referral medical examinations should be provided by the school health physician for those pupils referred by the public health nurse, teacher, and/or parent with suspected or known liabilities not under medical supervision. (23)	70	67	73	56	70	78	79	76	66	70	71
Medical examinations provided in the school health services should be of a quality:											
a) To command medical respect.	92	94	93	89	97	93	93	90	95	88	96
b) To provide sufficient information to guide counseling of pupils and parents.	96	96	96	96	97	95	100	98	94	92	98
c) To provide a desirable learning experience for the pupil. (24)	84	84	84	81	87	83	86	81	85	78	87
Dental Health Services											
The dental health services should be preventive and educational in nature.(25)	97	94	99	100	92	98	100	98	95	92	99
If the community water supply is not fluoridated, educational and health authorities should stimulate and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries.(26)	85	73	93	85	70	95	100	86	83	85	85
In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries. (27)	62	59	64	67	54	66	79	64	58	72	57

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I.	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
School dental inspections should be utilized:											
a) To estimate group dental needs	77	78	77	67	78	81	64	83	75	88	72
b) To facilitate community planning to meet dental needs. (28)	77	73	79	78	70	81	86	81	74	85	73
Pupils should be referred to the family dentist or dental clinic for routine dental examinations and correction of dental defects. (29)	87	82	90	93	78	90	100	93	80	90	85
If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately. (30)	88	96	82	89	95	83	93	95	82	90	87
Dental emergencies that occue when the dental staff members are in the school should be given temporary, palliative treatment, if necessary, and referred to the family dentist or dental clinic. (31)	86	84	88	89	84	86	86	83	88	80	89
Mental Health Services											
Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include:											
a) Psychological examination and evaluation.	84	82	86	85	81	86	93	83	85	78	88
b) Social evaluation of the pupil and his home.	83	78	86	78	78	88	93	86	80	78	85
c) Counseling pupil and parents.	85	82	88	78	84	90	86	88	85	82	87
d) Psychiatric examination and assessment.	72	63	78	78	57	79	86	69	72	72	72
e) Special class placement. (32)	73	65	78	81	59	78	79	71	74	75	72

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr. II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The services of child guidance clinics, and/or mental health clinics, should be available for any student in need of further assessment and therapy. (33)	95	94	96	93	97	95	93	95	95	98	94
School health personnel should participate in the procedures of the child guidance clinics and mental health clinics in:											
a) Referral.	94	94	95	85	95	98	93	98	92	98	93
b) Preparation of the social evaluation (Case history).	86	82	89	70	86	93	71	93	85	90	84
c) Case conferences.	85	80	89	74	84	91	71	88	86	85	85
d) Follow-up procedures. (34)	88	78	95	78	81	97	86	88	88	88	88
Reports of psychological and psychiatric examinations should:											
a) Be recorded on the school health records.	27	35	22	19	38	24	64	33	15	20	30
b) Be recorded only as confidential information	73	69	75	67	76	74	64	79	72	68	76
c) Be interpreted to staff members	70	67	71	59	70	74	71	62	75	68	71
d) Be discussed with pupil and parents in terms of capabilities. (35)	67	65	68	56	70	71	64	64	71	62	70
Periodic appraisal of mental health needs and services for pupils should be made through analysis of:											
a) Student drop-out rates.	64	63	64	63	68	62	79	62	63	62	65
b) Case studies.	67	69	66	56	76	67	86	62	66	65	68
c) Consultation case loads.(36)	65	59	68	63	62	67	79	62	65	62	66
Cumulative Health Records											
Parents should be encouraged to provide information about the health history of the child and family:											

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
a) During the school registration conference or preschool medical examination.	98	96	99	96	97	98	100	95	98	98	98
b) Following any subsequent significant illness. (37)	93	92	95	93	92	95	100	88	95	88	96
The cumulative school health records should:											
a) Be filed in the school.	78	94	67	70	92	72	93	79	75	72	80
b) Accompany the pupil from grade to grade.	83	90	78	85	86	79	86	74	89	90	79
c) Accompany the pupil from school to school.	88	94	84	89	92	84	100	93	83	82	90
d) Have restrictions regarding the forwarding of certain confidential information. (38)	71	69	73	67	68	76	57	76	72	72	71
Teachers should be encouraged to use the cumulative health records.(39)	68	84	58	59	89	59	71	64	71	70	67
Teachers should have the opportunity to contribute significant information to these health records. (40)	89	88	90	81	92	91	93	79	95	82	93
Counseling and Follow-up Services											
Counseling and follow-up procedures should involve:											
a) Pupils.	95	94	96	93	97	95	100	95	94	95	95
b) Parents.	90	86	93	89	86	93	93	90	89	90	90
c) Family physicians and dentists.	82	69	90	81	68	91	100	79	80	88	79
d) Teachers and administrators.(41)	85	82	88	78	84	90	100	83	83	92	82
Counseling and follow-up procedures should focus on:											
a) The significance of appraisal findings.	91	90	92	78	95	95	100	86	92	90	91

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
b) The need for further examination and/or treatment.	89	88	89	78	89	93	93	88	88	92	87
c) The utilization of community resources to assist in the provision of needed assessment and/or treatment.	91	90	92	78	97	93	93	88	92	88	93
d) Helping the pupil to accept responsibility for his own health. (42)	96	96	96	85	100	98	100	98	94	95	96
There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. (43)	80	71	86	85	65	88	100	88	71	85	78
There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family. (44)	82	76	86	70	81	88	93	79	83	80	83
Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others should be coordinated. (45)	94	96	93	93	97	93	100	90	95	90	96
The school health physician and the public health nurse should initiate follow-up steps to ensure necessary medical care for all pupils whose parents are unable to provide it.(46)	92	92	92	89	92	93	93	100	86	90	93
The correction of defects should be appraised:											
a) On an individual basis.	88	88	88	93	89	84	79	88	89	88	88
b) Through periodic surveys of correction rates. (47)	48	51	47	41	54	48	43	50	48	55	45

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual.	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The Detection, Prevention and Control of Communicable Diseases											
The school should contribute to the prevention, detection, and control of communicable diseases through the application of policies and procedures:											
a) Determined jointly by the departments of health and departments of education.	90	90	90	85	92	91	79	95	89	88	91
b) Coordinated with those of appropriate voluntary health agencies.	70	78	66	56	81	71	50	74	72	78	67
c) Interpreted to and understood by local physicians.	89	80	95	85	78	97	93	88	88	90	88
d) Interpreted to and understood by parents.(48)	91	86	95	93	84	95	93	90	91	90	91
The local health department should provide each school with:											
a) A list of reportable communicable diseases.	91	88	93	96	84	93	93	95	88	92	90
b) A list of non-reportable communicable diseases.	77	78	77	81	73	78	71	81	75	82	74
c) Copies of official regulations concerning isolations, quarantine and exclusion.	93	96	90	93	95	91	79	98	92	95	91
d) Periodic reports on the prevalence and distribution of communicable diseases. (49)	66	84	53	74	84	50	57	69	66	72	62
All school personnel should be instructed in the recognition of observable signs and symptoms of communicable diseases and the specific measures for their control. (50)	76	86	70	67	92	71	64	69	83	72	78

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual.	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Levels of immunity against smallpox, diphtheria, tetanus, whooping cough and poliomyelitis should be established in infancy and maintained in the preschool years so that the child enters school with protection against these diseases. (51)	96	94	97	93	95	98	100	93	97	100	94
Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil. (52)	84	78	89	74	78	93	93	86	83	88	83
The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health. (53)	75	80	73	78	78	72	86	67	78	68	79
Pupils should be readmitted to school after a reportable communicable disease only after official release from the local department of health. (54)	58	78	45	52	84	45	64	43	66	55	60
School personnel should encourage parents to keep pupils at home when genuinely ill. (55)	99	98	100	100	97	100	100	98	100	100	99
The school should cooperate in the execution of specific public health regulations and recommendations for the control of diseases spread by insects and animals. (56)	93	92	95	96	92	93	93	88	97	90	95

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
There should be a planned programme of tuberculosis prevention, detection, and control for:											
a) All pupils.	91	88	93	89	89	93	100	86	92	92	90
b) All school personnel. (57)	92	92	92	93	95	90	100	88	92	90	93
Plans for the Provision of First Aid and Emergency Care											
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of and periodic assessment of a planned programme for first aid and emergency care. (58)	89	84	93	81	86	95	100	86	89	92	88
The medical officer of health should provide:											
a) A list of first aid supplies.	87	82	90	85	81	91	93	81	89	88	87
b) Advice regarding the location and up-keep of first aid kits.	88	84	90	85	84	91	93	86	88	88	88
c) A guide for first aid and emergency procedures. (59)	88	82	92	81	81	95	100	83	88	90	87
The provision of emergency care and first aid for students and staff members should be primarily the responsibility of the school administration with the assistance of professional health personnel, if in the school, at the time of a serious emergency. (60)	91	86	95	93	84	95	93	86	94	88	93
School personnel should limit their first aid and emergency measures to those defined in the above-mentioned guide. (61)	80	76	84	81	73	84	64	79	85	85	78

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
One person in each school should be responsible for first aid and emergency plans. (62)	69	49	82	67	49	83	71	74	65	65	71
All teachers should have first aid preparation equivalent to the Red Cross Course or St. John Ambulance Course.(63)	66	59	71	56	62	74	71	74	60	72	63
The first aid and emergency procedures should be interpreted to:											
a) Parents.	80	78	82	63	81	88	71	86	78	88	77
b) Local physicians and dentists (regarding dental emergencies).(64)	73	61	81	63	59	86	71	81	68	88	66
Detailed information should be obtained from all staff members, and from parents for all pupils, at the beginning of each school year, to facilitate locating the parent or guardian, and using the physician and hospital of choice in an emergency. (65)	94	94	95	93	97	93	100	93	94	93	95
The school plant should be planned, and specific procedures established, for the protection of pupils in the event of likely or possible natural types of disaster such as fire, flood, tornado, or blizzard, striking the school or community. (66)	91	94	89	89	95	90	86	95	89	98	88
Each school should have an accident record form to be:											
a) Completed on every accident.	85	94	84	89	86	83	86	88	83	88	84
b) Reviewed periodically in terms of accident prevention measures. (67)	82	78	85	85	78	83	93	83	80	85	80

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
The Facilities for School Health Services											
The school health room or suite should provide adequate space and facilities to administer the school health services carried on within the school. (68)	98	100	97	93	100	100	100	100	97	100	98
This room or suite should be located where it can be supervised by a member of the school staff when not under the supervision of a member of the professional health staff. (69)	90	90	90	78	95	93	86	86	94	88	91
Provisions for Exceptional (Handicapped) Pupils											
The local medical officer of health, or the school health physician, should provide medical consultation to the educational administration and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils. (70)	86	84	88	85	81	90	86	90	93	90	85
The school health programme for exceptional pupils should:											
a) Be the same as for other pupils.	25	33	21	41	30	16	21	24	28	28	24
b) Be more comprehensive than for other pupils.	40	47	36	33	46	40	71	43	31	38	41
c) Pay particular attention to their emotional and social adjustment. (71)	74	78	71	63	81	71	93	76	68	75	73

TABLE 57 (Continued)

Criterion	Total	Profession		Type of Preparation			Length of Experience			Involvement	
		Educ.	Health	Dual	Educ.	Health	Under 10 Years	10-19 Years	20 Years and More	Gr.I	Gr.II
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
There should be appropriate adaptations of the following to meet the health needs of some of the exceptional pupils.											
a) The school programme.	81	80	82	74	81	84	64	83	83	85	79
b) The school building	73	71	74	78	68	74	57	76	74	80	70
c) The teaching facilities.(72)	74	71	75	78	70	74	57	74	77	80	71
There should be provisions for exceptional pupils in:											
a) The regular classroom.	67	71	64	67	68	67	43	74	68	78	62
b) Special classes.	61	57	63	63	51	66	57	57	65	78	52
c) Special schools. (73)	48	51	47	56	43	48	43	50	49	58	44
(Number of respondents)	(122)	(49)	(73)	(27)	(37)	(58)	(14)	(42)	(65)	(40)	(82)

APPENDIX I

THE GROUPS OF CRITERIA USED IN THE DETERMINATION OF THE RELATIVE AGREEMENTS BETWEEN THE GROUPS OF RESPONDENTS

THE GROUPS OF CRITERIA USED IN THE DETERMINATION OF THE RELATIVE AGREEMENTS BETWEEN THE GROUPS OF RESPONDENTS

In order to avoid including the many basic tables, the criteria used in each specific group to determine the relative agreements between the groups of respondents are listed in order to allow the reader to make related calculations.

The capital letter indicates the part of the instrument in which the criterion is located. The arabic numeral is the same as that in the instrument. The small letter in parentheses indicates the specific sub-criterion used.

The groups include the following criteria:

School-Community Coordination of the School Health Program:
A. 1 (a, b), and A. 2 (a, b).

The Educational Nature of the School Health Program:
B. 19 (c, e), B. 30 (a, b, c), C.1, C.9, C.10, C. 12, C. 13, D. 1 (a, b), and D. 24.

Interdepartmental Planning and Organization:
A. 4, A. 5 (a, b), A. 6 (a), D. 6 (a), D. 11 (b), and D. 48 (a).

Coordination of the School Health Program with Official Public Health Programs:
B. 1 (a, b, c, d), B. 14 (a), B. 15 (b), B. 28, C. 19 (b), D. 3 (c), D. 53, D. 56, D. 58, and D. 70.

Coordination of the School Health Program with Other Community Agencies:
B. 20 (a, b), C. 8 (c), C. 16 (a, b), D. 2 (n), D. 18 (b), D. 26, D. 28 (b), and D. 48 (b).

School Health Policies and Procedures:
A. 6 (a, b, c, d, e, f), B. 8 (a, b, c, d), B. 9, D. 48 (a, b, c, d), and D. 66.

Health Needs, Interests, Attitudes, and Practices:
A. 3 (a, b, c, d), B. 16, C. 6, C. 7 (a), C. 13, D. 2 (a, c, k, m, n), D. 3 (a), D. 8, D. 9 (a), D. 28 (a), D. 33, D. 72 (a, b, c).

Pupil Involvement:
B. 4, B. 17 (a, b), B. 19 (e), B. 21, C. 15, C. 16 (a, b), D. 1 (a), D. 12 (a), D. 13 (b), D. 14 (b), D. 24 (a), D. 35 (d), D. 41 (a), and D. 42 (d).

Attention to Individual Health Differences:
B. 5 (a, b), B. 6, B. 7, B. 8 (a, b, c, d), B. 9, C. 6, C. 13, D. 8, D. 9 (a), D. 10, D. 47 (b).

Coordination of the School Health Program with Parental Responsibility:
A. 1 (a), B. 4 (d), C. 19 (b), D. 2 (g), D. 12 (c), D. 20, D. 21, D. 32 (c), D. 35 (d), D. 41 (b), D. 48 (d), D. 64 (a), and D. 65.

Coordination of the School Health Program with Family Medical and Dental Supervision:
A. 1 (b), A. 6 (e), D. 18 (a), D. 19, D. 24, D. 31, D. 14 (c), D. 43, D. 44, D. 48 (c), and D. 64 (b).

Communications to Others:
A. 6 (d, e, f), B. 15 (a), D. 35 (c), D. 43, D. 48 (d), D. 49 (d), and D. 64 (a, b).

Communications with Others:
A. 5 (b), B. 15 (b), D. 8, D. 9 (a, b), D. 10, D. 11 (a), D. 18 (a, b), D. 20, D. 21, and D. 35 (d).

Communications from Others:
D. 37 (a, b), D. 44, and D. 65.

Appraisal and Evaluation:
A. 7 (a), B. 14 (a, c), C. 7 (b), D. 2 (a, b), D. 36 (a, b, c), D. 47 (a, b), D. 58, and D. 67 (b).

Health of School Personnel:
B. 1 (a, b, c, d), B. 2, B. 3, D. 2 (b, f, i, j), and D. 57 (b).

Emotional and Social Environment:
B. 4 (a, b, c, d), B. 5 (a.b), B. 6, B.7 (a, b), B. 8 (a, b, c, d), B.9, B. 10, and B. 11.

Physical Environment:
B. 12, B. 13 (a, b, c, d, e, f, g), B. 14 (a), B. 15 (a, b), B. 16, B. 17 (a, b).

Control Measures:
B. 12, B. 13 (a, b, c, d, e, f, g), B. 14 (a).

Environmental Health Practices:
B. 15 (a, b), B. 16, and B. 17 (a, b).

Safety and Accident Prevention Within the Buildings and Grounds:
B. 18 (a, b, c, d, e), B. 19 (a, b, c, d, e), B. 20 (b), and B. 21.

Safety and Accident Prevention on Way to and from School:
B. 20 (a), B. 22 (a, b, c), and B. 23 (a, b, c, d).

School Lunch Facilities and Services:
B. 24 (a, b), B. 25, B. 26, B. 27 (a, b, c, d, e, f, g, h, i, j), B. 28, B. 29 (a, b, c), and B. 30 (a, b, c).

Planning and Conduct of Health Instruction:
C. 2 (a, b), C. 3, C. 9, C. 10, C. 11 (a, b, c, d, e), C. 12, C. 13, C. 15 (a, b), C. 16 (a, c), C. 17, C. 18 (a, b), C. 19 (b).

Nature and Types of Health Instruction:
C. 1, C. 9, C. 10, C. 12, C. 13, and C. 16 (a, b).

Correlation with Other Subjects:
C. 11 (a, b, c, d, e).

Personnel Involved in Health Education:
C. 4 (a), C. 5, C. 6, C. 7 (a, b, c, d, e, f), C. 8 (a, b, c).

Teacher Involvement:
C. 4 (a), C. 5, and C. 6.

Health Personnel:
C. 7 (a, b, c, d, e, f), and C. 8 (a, b, c).

Topical Content Areas: C. 14 (a-s).

Professional Preparation:
C. 20 (a, b, c, d), C. 21, C. 22 (a, b), and C. 23.

Continuing Education:
C. 24, C. 25, C. 26, C. 27 (a, b, c, d), and C. 28 (a, b, c).

Nature of Health Services:
D. 1 (a, b), and D. 2 (a, b, c, d, e, f, g, h, i, j, k, l, m, n).

Planning of School Health Services:
D. 6 (a, b), D. 9 (a, b), D. 10, D. 11 (a, b).

School Health Service Personnel:
D. 3 (a, b, c), D. 4, and D. 5 (a, b).

Health Appraisals:
D. 2 (a, b, k), D. 7 (b, c, d, e, g, h), and D. 8).

Screening Tests:
D. 12 (a, b, c), D. 13 (a, b, c, d), D. 14 (a, b, c), D. 15 (b), D. 16, D. 17, D. 18 (a, b).

Medical Examinations:
D. 19, D. 20, D. 21, D. 22, D. 23, D. 24 (a, b, c).

Dental Health Services:
D. 25, D. 26, D. 27, D. 28 (a, b), D. 29, D. 30, D. 31.

Mental Health Services:
D. 32 (a, b, c, d, e), D. 33, D. 34 (a, b, c, d), D. 35 (a, c, d), and D. 36 (a, b, c).

Cumulative Health Records:
D. 35 (a), D. 37 (a, b), D. 38 (a, b, c, d), D. 39, and D. 40.

Counseling and Follow-Up Services:
D. 2 (e, f, g), D. 41 (a, b, c, d), D. 42 (a, b, c, d), D. 43, D. 44, D. 45, D. 46, and D. 47 (a, b).

Communicable Disease Prevention, Detection, and Control:
D. 2 (h), D. 16, D. 17, D. 48 (a, b, c, d), D. 49 (a, b, c, d), D. 50, D. 51, D. 52, D. 53, D. 54, D. 55, D. 56, and D. 57 (a, b).

Plans for the Provision of First Aid and Emergency Care:
D. 2 (j), D. 58, D. 59 (a, b, c), D. 60, D. 61, D. 62, D. 63, D. 64 (a, b), D. 65, D. 66, and D. 67 (a, b

Facilities for School Health Services: D. 68, and D. 69.

Provisions for Exceptional (Handicapped) Pupils:
D. 2 (k, l, m), D. 70, D. 71 (c, b), D. 72 (a, b, c), D. 73 (a, b, c).

APPENDIX J

CRITERIA JUDGED AT LEAST 10 PER CENT HIGHER BY ONE RESPONDENT GROUP

TABLE 58

CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE EDUCATION PREPARATION AND THE HEALTH PREPARATION GROUPS

Criterion	Dual Pct.	Educ. Pct.	Health Pct.
The school health programme should be based on:			
b) The health interests of students. (A.3)	61	49	44
There should be a planned programme of evaluation of the entire school health programme:			
a) On a continuous basis. (A.7)	64	51	46

TABLE 59

CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 10-19-YEAR EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
The school health programme should be based on: d) The health practices of students. (A.3)	67	49
The school health programme should be organized and administered by the provincial and local departments of education and departments of health. (A.4)	67	44

TABLE 60

CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 20-YEAR-AND-MORE EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	20 Yrs. and More Pct.
The school health programme should be coordinated with: b) The entire educational programme. (A.2)	87	76
The school health programme should be organized and administered jointly by the provincial and local departments of education and departments of health.* (A.4)	67	55
Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation: b) At the local level. (A.5)	80	70

*Judged at least 10 per cent higher by the under-10-year than by the 10-19-year experience group.

TABLE 61

CRITERIA FOR THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM JUDGED AT LEAST 10 PER CENT HIGHER BY GROUP I THAN BY GROUP II

Criterion	Group I Pct.	Group II Pct.
Interdepartmental committees on school health should function to facilitate interprofessional and interagency understanding and cooperation:		
a) At the local level. (A.5)	83	68
School health policies and procedures should:		
c) Define the responsibilities of personnel. (A.6)	83	73
There should be a planned programme of evaluation of the entire school health programme:		
a) On a continuous basis. (A.7)	59	48

TABLE 62

CRITERIA FOR HEALTHFUL SCHOOL LIVING JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE EDUCATION PREPARATION GROUP

Criterion	Dual Pct.	Educ. Pct.
The medical officer of health, and/or the public health inspector, should inspect each school building to determine whether it meets minimum standards of hygiene, sanitation and safety: a) On an annual basis. (B.14)	79	69
School lunchrooms should be large enough to permit students to eat there whether they buy lunch or bring it from home. (B.25)	100	85
School lunch facilities and services should be used for instruction of the students in: b) Food selection. (B.30)	79	69

TABLE 63

CRITERIA FOR HEALTHFUL SCHOOL LIVING JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE HEALTH PREPARATION GROUP

Criterion	Dual Pct.	Health Pct.
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide: d) Arrangements for all school personnel to receive appropriate immunization offered in the school health services. (B.1)	79	65
Perfect, or near-perfect, attendance should not be over-emphasized since this tends to keep the sick child in school. (B.10)	75	65

TABLE 64

CRITERIA FOR HEALTHFUL SCHOOL LIVING JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 10-19-YEAR EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development, implementation, and/or assessment of a plan to provide:		
a) Pre-employment examinations.	80	65
b) Periodic medical examinations.(B.1)	67	56
Teachers should plan their teaching:		
a) To permit mastery of subject matter by each pupil at his own rate.	80	63
b) To provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear. (B.5)	87	72
Pupils should be released from class on the request of the parent to keep selected medical and dental appointments. (B.11)	80	60
The possibility of accidents and fires in school should be minimized through:		
e) A planned program of fire and accident prevention. (B.18)	100	88
With regard to traffic safety:		
c) Trained traffic guards, on duty at appropriate times in urban areas, should be:		
ii) Adults. (B.22)	53	42
When students bring lunches there should be:		
a) Adequate storage facilities for the lunches. (B.24)	100	88
Lavatories and toilets should be located near lunchrooms to promote handwashing before eating. (B.26)	93	77

TABLE 64 (Continued)

Criterion	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
If food is prepared, cooked, and served in the school, there should be minimum standards with respect to:		
c) No carbonated beverages, chocolate milk, gum or candy for sale. (B.27)	73	63
School lunch facilities and services should be used for instruction of the students in:		
b) Food selection.	80	65
c) Proper eating habits and social customs. (B.30)	80	63

TABLE 65

CRITERIA FOR HEALTHFUL SCHOOL LIVING JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 20-YEAR-AND-MORE EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	20 Yrs. and More Pct.
An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill. (B.3)	93	81
Teachers should plan their teaching:		
a) To permit mastery of subject matter by each pupil at his own rate.*	80	69
b) To provide successful experiences for each pupil without excessive competition, fatigue, undue worry, or fear.* (B.5)	87	77
Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped. (B.9)	100	89
Lavatories and toilets should be located near lunchrooms to promote handwashing before eating.* (B.26)	93	72

*Judged at least 10 er cent higher by the under-10-year experience group than by the 10-19-year experience group.

TABLE 66

CRITERIA FOR STUDENT HEALTH INSTRUCTION JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE EDUCATION PREPARATION GROUP

Criterion	Dual Pct.	Educ. Pct.
Health instruction should permeate the entire curriculum and life of the school. (C.1)	82	69
The major responsibility for health teaching in the elementary school should belong to:		
a) The classroom teacher. (C.4)	61	41
Such professional health personnel should include:		
a) Staff members involved in the school health services. (C.8)	96	79
Systematically organized health instruction should be provided for all pupils in all grades. (C.9)	75	64
Systematically organized health instruction should receive attention equal to that of any major part of the curriculum. (C.10)	68	56
Health instruction should be correlated with instruction in other subject matter fields such as:		
d) Social studies.	86	67
e) Driver education. (C.11)	75	51
Informal and more incidental health teaching in relation to daily activities should supplement systematically organized health teaching. (C.12)	96	79
There should be a planned programme for parent education and for community understanding of the school health programme provided by:		
b) The school and the local department of health. (C.19)	75	56

TABLE 66 (Continued)

Criterion	Dual Pct.	Educ. Pct.
The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:		
b) iv) Local and provincial health and welfare services and programmes.	86	72
l) The influence of population increase in relation to personal and community health problems.	75	59
q) Vocations and careers in the health sciences and applied fields.	71	46
r) Developments in health research applicable to improvement of personal and community health practices.	68	49
s) National and international health problems and programmes. (C.14)	71	49

TABLE 67

CRITERIA FOR STUDENT HEALTH INSTRUCTION JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE HEALTH PREPARATION GROUP

Criterion	Dual Pct.	Health Pct.
An individual, or group of individuals, with specific qualifications in health education should be delegated responsibility for the overall planning of health education: b) Within each school. (C.2)	61	30
Informal and more incidental health teaching in relation to daily activities should supplement systematically organized health teaching.* (C.12)	96	79

*Judged at least 10 per cent higher by the dual preparation group than by the education preparation group.

TABLE 68

CRITERIA FOR STUDENT HEALTH INSTRUCTION JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 10-19-YEAR EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
In junior high and high schools the major responsibility for health instruction should be delegated to teachers with special preparation in health education. (C.5)	93	77
Professional health personnel should assist school personnel in:		
b) Assessing the scientific accuracy of instructional content and teaching materials.	100	79
c) Curriculum development.	93	72
e) In-service education programmes. (C.7)	80	70
Systematically organized health instruction should be provided for all pupils in all grades. (C.9)	87	74
Health instruction should be correlated with instruction in other subject matter fields such as:		
b) Science. (C.11)	93	79
Students should be afforded learning experiences through:		
a) Field trips to community official and voluntary health agencies.	67	44
b) Participation in the programmes of community official and voluntary health agencies. (C.16)	60	40
The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:		
b) Consumer health education:		
ii) The reliability of sources of health information.	100	88
iv) Local and provincial health and welfare services and programmes.	87	77

TABLE 68 (Continued)

Criterion	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
c) First aid procedures.	100	86
h) Causes and prevention of important non-communicable diseases.	87	77
l) The influence of population increase in relation to personal and community health problems.	80	67
n) Study of personality and adjustment.	80	70
q) Vocations and careers in the health sciences and applied fields. (C.14)	80	58

TABLE 69

CRITERIA FOR STUDENT HEALTH INSTRUCTION JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 20-YEAR-AND-MORE EXPERIENCE GROUP

Criterion	Under 10 Yrs. Pct.	20 Yrs. and More Pct.
Curriculum planning should involve all individuals and groups likely to contribute to health instruction. (C.3)	87	75
In junior high and high schools the major responsibility for health instruction should be delegated to teachers with special preparation in health education.* (C.5)	93	77
Professional health personnel should assist school personnel in:		
c) Curriculum development. (C.7)	93	75
Systematically organized health instruction should be provided for all pupils in all grades.* (C.9)	87	75
Health instruction should be correlated with instruction in other subject matter fields such as:		
a) Physical education.	100	89
b) Science.* (C.11)	93	90
The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:		
b) Consumer health education:		
ii) The reliability of sources of health information.*	100	86
e) First aid procedures.*	100	84
j)Family living:		
ii) The value of the family system	93	80
iii) Preparation for marriage and family life (in senior high grades).	93	80
p) Emotional, social and physical health aspects of:		
iii) Drugs.	100	88

TABLE 69 (Continued)

Criterion	Under 10 Yrs. Pct.	20 Yrs. and More Pct.
q) Vocations and careers in the health sciences and applied fields.* (C.14)	80	69
The objectives and methods of health teaching should:		
a) Stimulate active participation of the pupils in the learning experiences. (C.15)	100	89
Students should be afforded learning experiences through:		
b) Participation in the programmes of community official and voluntary health agencies.* (C.16)	60	45

*Judged at least 10 per cent higher by the under-10-year experience group than by the 10-19-year experience group.

TABLE 70

CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE EDUCATION PREPARATION GROUP

Criterion	Dual Pct.	Educ. Pct.
Comprehensive preparation in school health and health education should be required of all prospective teachers to meet the minimum licensing requirements of the provincial department of education. (C.21)	75	59
Special preparation for health teachers for junior and senior high schools, in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include:		
b) Work in the social sciences.	93	82
c) Work in the physical sciences. (C.22)	86	59
A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. (C.26)	89	69
More informal in-service learning experiences should be planned in relation to:		
a) Supervision.	61	46
b) Consultation.	75	56
c) Service on functional school and community health committees.	71	44
d) Participation in health organizations. (C.27)	68	46
In-service programmes should be provided for non-instructional school personnel such as:		
a) Foodhandlers.	75	54
b) Bus drivers.	71	56
c) Custodians. (C.28)	71	56

TABLE 70

CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE HEALTH PREPARATION GROUP

Criterion	Dual Pct.	Health Pct.
More informal in-service learning experiences should be planned in relation to:		
c) Service on functional school and community health committees.*	71	58
d) Participation in health organizations.* (C.27)	68	56

*Judged at least 10 per cent higher by the dual preparation group than by the education preparation group.

TABLE 71

CRITERIA FOR PROFESSIONAL PREPARATION AND CONTINUING EDUCATION JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 10-19-YEAR EXPERIENCE GROUP

CRITERION	Under 10 Yrs. Pct.	10-19 Yrs. Pct.
Specialized health personnel should:		
c) Meet, or surpass, the minimum professional qualifications recommended by the provincial department of health. (C.20)	80	67
Special preparation for health teachers for junior high and senior high schools, in an undergraduate programme in physical and health education, or its equivalent in the health sciences, should include:		
c) Work in the physical sciences. (C.22)	80	70
More informal in-service learning experiences should be planned in relation to:		
c) Service on functional school and community health committees.	67	47
d) Participation in health organizations. (C.27)	60	49

TABLE 72

CRITERIA FOR CONTINUING EDUCATION JUDGED AT LEAST 10 PER CENT HIGHER BY GROUP I THAN BY GROUP II

Criterion	Gr.I Pct.	Gr. II Pct.
A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. (C.26)	90	75
More informal in-service learning experiences should be planned in relation to:		
a) Supervision.	65	51
b) Consultation.	75	61
d) Participation in health organizations. (C.27)	62	52
In-service programmes should be provided for non-instructional school personnel such as:		
a) Foodhandlers.	82	65
b) Bus Drivers. (C.28)	75	64

TABLE 73

CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE EDUCATIONAL PREPARATION GROUP

Criterion	Dual Pct.	Educ. Pct.
The social worker should be introduced:		
a) In an advisory capacity to professional health workers, educational administrators and teachers. (D.5)	67	51
Vision screening tests should be provided:		
a) With a lighted Snellen chart (and/or other methods approved by the provincial department of health).	93	81
b) For all pupils referred by self, teacher, and/or parents. (D.13)	93	81
As part of the school health services, measurements of height and weight should be determined and recorded:		
b) For only those pupils for whom surveillance of the growth pattern is indicated. (D.15)	56	46
The introduction of other screening tests should be discussed with:		
b) Appropriate voluntary health agencies. (D.18)	63	51
A parent should be present at any examination of the young pupil whether in the school health services, physician's office, or clinic. (D.20)	59	49
If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries. (D.26)	85	70

TABLE 73 (Continued)

Criterion	Dual Pct.	Educ. Pct.
In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries.(D.27)	67	54
Pupils should be referred to the family dentist or dental clinic for routine dental examination and correction of dental defects. (D.29)	93	78
Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include:		
d) Psychiatric examination and assessment.	78	57
e) Special class placement. (D.32)	81	59
Counseling and follow-up procedures should involve:		
c) Family physicians and dentists.(D.41)	81	68
There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. (D.43)	85	65
The local health department should provide each school with:		
a) A list of reportable communicable diseases. (D.49)	96	84
One person in each school should be responsible for first aid and emergency plans. (D.62)	67	49
The health department should provide each school with:		
d) Periodic reports on the prevalence and distribution of communicable diseases. (D.49)	74	50
The school health programme for exceptional pupils should:		
b) Be more comprehensive than for other pupils. (D.71)	41	16

TABLE 74

CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED AT LEAST 10 PER CENT HIGHER BY THE DUAL PREPARATION GROUP THAN BY THE HEALTH PREPARATION GROUP

Criterion	Dual Pct.	Health Pct.
School health services should make provisions to:		
b) Appraise the health status of staff members.	63	41
f) Counsel staff members. (D.2)	63	52
If the local board of education wants more extensive school health services than the local board of health can provide, it should:		
b) Establish supplementary school health services. (D.6)	30	5
The local health department should provide each school with:		
d) Periodic reports on the prevalence and distribution of communicable diseases. (D.49)	74	50

TABLE 75

CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 10-19-YEAR EXPERIENCE GROUP

Criterion	Under 10 Years Pct.	10-19 Years Pct.
All school health service activities should:		
a) Provide positive learning experiences for the students.	86	76
b) Be utilized in health teaching. (D.1)	86	74
School health services should make provisions to:		
b) Appraise the health status of staff members:	64	50
e) Counsel students.	100	88
g) Counsel parents, through home visiting when indicated.	100	83
j) Plan for the emergency care of injured and severely ill students and staff members.	93	76
l) Assist in planning for the health supervision of exceptional (handicapped) pupils.	100	86
n) Coordinate the community resources to meet the health needs of pupils. (D.2)	93	81
Specialized health personnel should be available on an adequate time basis related to:		
a) The needs of the students.	93	81
b) The nature of the educational programme.	86	71
c) The community health problems. (D.3)	100	79
Auxiliary personnel, such as the certified nursing assistant, the audiometric technician and the clerk should be employed under the direct supervision of qualified professional health personnel to release the professional worker from tasks not requiring professional competencies. (D.4)	86	76
Vision screening tests should be provided:		
b) For all pupils referred by self, teacher, and/or parents.	93	83
d) Including colour vision screening in an upper grade of the elementary school. (D.13)	86	71

TABLE 75 (Continued)

Criterion	Under 10 Years	10-19 Years
	Pct.	Pct.
Hearing should be screened:		
a) With a pure tone audiometer (and/or other methods approved by the provincial department of health). (D.14)	100	88
Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals. (D.16)	93	83
All positive reactors to the tuberculin test should be given a chest x-ray at once, repeated at intervals dependent upon the findings. (D.17)	100	83
The school health physician should examine routinely, or arrange for the examination of, only those pupils who are not able to obtain an examination from a private physician or clinic. (D.22)	79	67
If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries. (D.26)	100	86
In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries. (D.27)	79	64
Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include:		
a) Psychological examination and evaluation.	93	83
d) Psychiatric examination and assessment. (D.32)	86	69

TABLE 75 (Continued)

Criterion	Under 10 Years Pct.	10-19 Years Pct.
Reports of psychological and psychiatric examinations should:		
a) Be recorded on the school health records. (D.35)	64	33
Periodic appraisal of mental health needs and services for pupils should be made through analysis of:		
a) Student drop-out rates.	79	62
b) Case studies.	86	62
c) Consultation case loads. (D.36)	79	62
Parents should be encouraged to provide information about the health history of the child and family:		
b) Following any subsequent significant illness. (D.37)	100	88
The cumulative school health records should:		
a) Be filed in the school.	93	79
b) Accompany the pupil from grade to grade. (D.38)	86	74
Teachers should have the opportunity to contribute significant information to these health records. (D.40)	93	79
Counseling and follow-up procedures should focus on:		
a) The significance of appraisal findings. (D.42)	100	86
There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings. (D.43)	100	88
There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family. (D.44)	93	79
Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others should be coordinated. (D.45)	100	90

TABLE 75 (Continued)

Criterion	Under 10 Years Pct.	10-19 Years Pct.
The name and address of each pupil excluded from school on suspicion of communicable disease should be reported to the local medical officer of health. (D.53)	86	67
Pupils should be readmitted to school after a reportable communicable disease only after official release from the local department of health. (D.54)	64	43
There should be a planned programme of tuberculosis prevention, detection and control for:		
a) All pupils.	100	86
b) All school personnel. (D.57)	100	88
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of, and periodic assessment of, a planned programme for first aid and emergency care. (D.58)	100	86
The medical officer of health should provide each school with:		
a) A list of first aid supplies.	93	81
c) A guide for first aid and emergency procedures. (D.59)	100	83
Each school should have an accident record form to be:		
b) Reviewed periodically in terms of accident prevention measures. (D.67)	93	83
The school health programme for exceptional pupils should:		
b) Be more comprehensive than for other pupils.	71	43
c) Pay particular attention to their emotional and social adjustment. (D.71	93	76

TABLE 76

CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED AT LEAST 10 PER CENT HIGHER BY THE UNDER-10-YEAR EXPERIENCE GROUP THAN BY THE 20-YEAR-AND-MORE EXPERIENCE GROUP

Criterion	Under 10 Years Pct.	20 Years and More Pct.
School health services should make provisions to:		
b) Appraise the health status of staff members.	64	49
e) Counsel students.*	100	83
i) Plan for the health supervision of school personnel.	64	54
n) Coordinate the community resources to meet the health needs of students.* (D.2)	93	78
Specialized health personnel should be available on an adequate time basis related to:		
b) The nature of the educational programme.*	86	74
c) The community health problems.* (D.3)	100	78
The social worker should be introduced:		
a) In an advisory capacity to professional health workers, educational administrators and teachers. (D.5)	86	57
If the local board of education wants more extensive school health services than the local board of health can provide, it should:		
b) Establish supplementary school health services. (D.6)	29	17
Health appraisal procedures should include:		
e) Psychiatric examinations.*	64	51
g) Counseling.* (D.7)	100	88

TABLE 76 (Continued)

Criterion	Under 10 Years Pct.	20 Years and More Pct.
The classroom teacher should participate in the health appraisals in order to more clearly understand the health needs of pupils in relation to their performance.* (D.8)	93	75
Individual teacher-nurse conferences should be held regularly: b) To share information about the health status of pupils including reports of screening procedures and examinations. (D.9)	100	86
The introduction of other screening tests should be discussed with: a) The local medical and/or dental society. (D.18)	93	75
The school health physician should examine routinely, or arrange for the examination of, only those pupils who are not able to obtain an examination from a private physician or clinic.* (D.22)	79	52
Referral medical examinations should be provided by the school health physician for those pupils referred by the public health nurse, teacher, and/or parent with suspected or known liabilities not under medical supervision. (D.23)	79	66
If the community water supply is not fluoridated, educational and health authorities should stimulate, and join forces with, other community agencies to encourage fluoridation of the public water supply as a means of reducing dental caries.* (D.26)	100	83
In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries.* (D.27)	79	58

TABLE 76 (Continued)

Criterion	Under 10 Years Pct.	20 Years and More Pct.
School dental inspections should be utilized:		
b) To facilitate community planning to meet dental needs. (D.28)	86	74
Pupils should be referred to the family dentist or dental clinic for routine dental examination and correction of dental defects. (D.29)	100	80
If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately. (D.30)	93	82
Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include:		
b) Social evaluation of the pupil and his home.	93	80
d) Psychiatric examination and assessment. (D.32)	86	72
Reports of psychological and psychiatric examinations should:		
a) Be recorded on the school health records.* (D.35)	64	15
Periodic appraisal of mental health needs and services for pupils should be made through analysis of:		
a) Student drop-out rates.*	79	63
b) Case studies.*	86	66
c) Consultation case loads.* (D.36)	79	65
The cumulative school health records should:		
a) Be filed in the school.*	93	75
c) Accompany the pupil from school to school. (D.38)	100	83
Counseling and follow-up procedures should involve:		
c) Family physicians and dentists.*	100	80
d) Teachers and administrators.* (D.41)	100	83

TABLE 76 (Continued)

Criterion	Under 10 Years Pct.	20 Years and More Pct.
There should be direct written, and/or verbal, reports to the pupil's physician and dentist regarding appraisal findings.* (D.43)	100	71
There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family.* (D.44)	93	83
Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil. (D.52)	93	83
The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of and periodic assessment of a planned programme for first aid and emergency care.* (D.58)	100	89
The medical officer of health should provide: c) A guide for first aid and emergency procedures.* (D.59)	100	88
All teachers should have first aid preparation equivalent to the Red Cross Course or St. John Ambulance Course. (D.63)	71	60
Each school should have an accident record form to be: b) Reviewed periodically in terms of accident prevention measures.* (D.67)	93	80
The school health programme for exceptional pupils should: b) Be more comprehensive than for other pupils.* c) Pay particular attention to their emotional and social adjustment.*(D.71)	71 93	31 68

*Judged at least 10 per cent higher by the under-10-year than by the 10-19-year experience group.

TABLE 77

CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED AT LEAST 10 PER CENT HIGHER BY GROUP I THAN BY GROUP II

Criterion	Gr. I Pct.	Gr. II Pct.
School health services should make provisions to:		
b) Appraise the health status of staff members.	62	45
c) Encourage and facilitate the correction of remediable defects.	100	90
d) Assist the pupil to adjust to non-remediable defects.	100	90
i) Plan for the health supervision of school personnel. (D.2)	68	54
Specialized health personnel should be available on an adequate time basis related to:		
a) The needs of the students. (D.3)	95	83
Health appraisal procedures should include:		
c) Medical and dental examinations.	90	77
d) Psychological examinations. (D.7)	78	55
Hearing should be screened:		
c) For all pupils at appropriate intervals. (D.14)	90	80
In rural areas where water systems cannot be readily fluoridated, and in communities not yet providing fluoridated water, a programme of topical application of fluoride should be provided for young children and pupils as partial protection against dental caries. (D.27)	72	57

TABLE 77 (Continued)

Criterion	Gr. I Pct.	Gr. II Pct.
School dental inspections should be utilized:		
a) To estimate group dental needs.	88	72
b) To facilitate community planning to meet dental needs. (D.28)	85	73
The cumulative school health records should:		
b) Accompany the pupil from grade to grade. (D.38)	90	79
Counseling and follow-up procedures should involve:		
d) Teachers and administrators. (D.41)	92	82
The correction of defects should be appraised:		
b) through periodic surveys of correction rates. (D.47)	55	45
The school should contribute to the prevention, detection, and control of communicable diseases through the application of policies and procedures:		
b) Coordinated with those of appropriate voluntary health agencies. (D.48)	78	67
The local health department should provide each school with:		
d) Periodic reports on the prevalence and distribution of communicable diseases. (D.49)	72	62
The first aid and emergency procedures should be interpreted to:		
a) Parents.	88	77
b) Local physicians and dentists (regarding dental emergencies). (D.64)	88	66
The school plant should be planned, and specific procedures established for the protection of pupils in the event of likely, or possible, natural types of disaster such as fire, flood, tornado, or blizzard, striking the school or community. (D.66)	98	88

TABLE 77 (Continued)

Criterion	Gr. I Pct.	Gr. II Pct.
There should be appropriate adaptations of the following to meet the health needs of some of the exceptional pupils:		
b) The school building. (D.72)	80	70
There should be provisions for exceptional pupils in:		
a) The regular classroom.	78	62
b) Special classes.	78	52
c) Special classes. (D.73)	58	44

APPENDIX K

SUMMARY TABLES OF THE MEASURES OF AGREEMENT

TABLE 78

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession: Educators and Health Workers		Type of Preparation: Dual and Education		Dual and Health		Education and Health		Length of Experience: Under 10 Yrs. and 10-19 Yrs.		Under 10 Yrs. and 20 Yrs. and More		10-19 Yrs. and 20 Yrs. and More		Involvement: Group I and Group II	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
School-Community Coordination	8	.18	10	.24	10	.55	7	*	10	.18	13	.18	3	*	6	*
Educational Nature of the Program	3	*	9	.51	6		4	*	9	.41	6	*	6	*	5	*
Interdepartment Planning and Organization	7	*	6	*	9	.90	7	*	11	.59	8	.49	8	.81	7	*
Coordination with Offical Public Health Programs	9	.46	8	.51	6		10	.38	10	.61	7	*	7	*	8	.58
Coordination with Other Community Agencies	7	*	11	.37	7		9	.60	11	.50	10	.49	6	*	6	*
Policies and Procedures	7	*	11	.24	7		8	.18	7	*	6	*	4	*	7	*
Health Needs, Interests, Attitudes, and Practices	5	*	8	.53	8	.81	6	*	10	.56	9	.54	5	*	6	*
Pupil Involvement	4	*	6	*	5		5	*	7	*	6	*	6	*	4	*
Attention to Individual Health Differences	9	.20	16	.07	10	.60	12	-.02	8	.39	8	.35	5	*	5	*
Coordination with Parental Responsibility	10	.47	9	.62	11	.56	11	.46	7	*	6	*	4	*	6	*
Coordination with Family Medical and Dental Supervision	13	.30	10	-.06	12	.12	16	.00	9	.28	12	-.24	7	*	6	*
Communications to Others	11	.50	10	.46	11	.61	13	.40	8	.66	7	*	7	*	7	*
Communications with Others	13	.21	8	.24	12	.54	15	-.09	11	.55	11	.47	6	*	5	*
Communications from Others	5	*	4	*	6		4	*	10	.50	6	*	4	*	3	*
Appraisal and Evaluation	7	*	8	.61	11	.38	10	.58	12	.53	11	.66	3	*	5	*
Average of Average Differences	8		9		9		9		9		8		5		6	

*The value is not meaningful because the average difference is not sufficiently large to make the rankings relatively stable.

TABLE 79

THE COMPARISON OF THE GROUPS OF CRITERIA FOR SOME MAJOR DIMENSIONS OF THE NATURE AND ORGANIZATION OF THE SCHOOL HEALTH PROGRAM JUDGED HIGHER BY ONE GROUP ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession	Type of Preparation			Length of Experience			Involvement
	Educators and Health Workers	Dual and Educ.	Dual and Health	Educ. and Health	Under 10 Yrs. and 10-19 Yrs.	Under 10 Yrs. and 20 Yrs. and More	10 - 19 Yrs. and 20 Yrs. and More	Group I and Group II
School-Community Coordination	.75 (health)	.75 (educ.)	.50	.75 (health)	.75 (10-19yr.)	.75 (20 yr.)	.67 (20 yr.)	.75 (I)[3]
Educational Nature of the Program	.72 (health)	.62 (dual)	.50	.58 (health)	.84 (10 yr.)[4]	.64 (10 yr.)	1.00 (20 yr.)	.67 (II)[5]
Interdepartmental Planning and Organization	.80 (health)	.71 (educ.)	1.00 (health)	.83 (health)	.86 (10 yr.)	.71 (10 yr.)	.71 (20 yr.)	.71 (II)
Coordination with Official Public Health Programs	.79 (health)	.62 (educ.)	.50	.54 (health)	.83 (10 yr.)	.57 (20 yr.)	.92 (20 yr.)	.50
Coordination with Other Community Agencies	.67 (health)	.55 (educ.)	.55 (dual)	.55 (health	.80 (10 yr.)	.73 (10 yr.)	.55 (10-19 yr.)	.78 (I)
Policies and Procedures	.57 (health)	.69 (educ.)	.62 (health)	.53 (educ.)	.56 (10-19yr.)	.69 (20 yr.)	.50	.62 (II)
Health Needs, Interests, Attitudes, and Practices	.60 (health)	.65 (educ.)	.70 (health)	.65 (health)	.53 (10 yr.)	.52 (10 yr.)	.58 (20 yr.)	.74 (I)
Pupil Involvement	.62 (health)	.89 (educ.)	.78 (health)	.67 (educ.)	.78 (10 yr.)	.64 (10 yr.)	.87 (20 yr.)	.53 (II)
Attention to Individual Health Differences	.79 (educ.)	.73 (educ.)	.75 (health)	.80 (educ.)	.87 (10 yr.)	.69 (10 yr.)	.87 (20 yr.)	.57 (II)
Coordination with Parental Responsibility	.92 (health)	.54 (educ.)	.83 (health)	.84 (health)	.64 (10 yr.)	.64 (10 yr.)	.75 (20 yr.)	.60 (II)
Coordination with Family Medical and Dental Supervision	1.00 (health)	.72 (dual)	.82 (health)	1.00 (health)	.72 (10 yr.)	.63 (10 yr.)	.60 (20 yr.)	.60 (I)
Communications to Others	.90 (health)	.50	.67 (health)	.80 (health)	.70 (10-19yr.)	.70 (20 yr.)	.60 (10-19 yr.)	.60 (II)
Communications with Others	.91 (health)	.55 (dual)	.91 (health)	.90 (health)	.82 (10 yr.)	.75 (10 yr.)	.67 (20 yr.)	.55 (I)
Communications from Others	1.00 (health)	.75 (educ.)	1.00 (health)	.75 (health)	1.00 (10 yr.)	1.00 (10 yr.)	1.00 (20 yr.)	1.00 (II)
Appraisal and Evaluation	.50	.54 (educ.)	.62 (health)	.54 (educ.)	.67 (10 yr.)	.62 (10 yr.)	.62 (20 yr.)	.73 (I)

[1] 10-19 years of experience.
[2] 20 years and more of experience.
[3] Group I
[4] Under 10 years of experience.
[5] Group II

TABLE 80

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession		Type of Preparation						Length of Experience						Involvement	
	Educators and Health Workers		Dual and Education		Dual and Health		Education and Health		Under 10 Yrs. and 10-19 Yrs.		Under 10 Yrs. and 20 Yrs. and More		10 - 19 Yrs. and 20 Yrs. and More		Group I and Group II	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Health of School Personnel	6	*	7	*	8	.57	6	*	10	.74	7	*	6	*	9	.64
Emotional and Social Environment	9	.51	17	.34	9	.50	10	.53	6	*	7	*	6	*	6	*
Physical Environment	5	*	4	*	4	*	4	*	5	*	6	*	5	*	4	*) [1]
(Control Measures	4	*	4	*	4	*	3	*	2	*	2	*	2	*	4	*)
(Practices	6	*	4	*	3	*	6	*	7	*	12	.00	10	.20	4	*)
Safety and Accident Prevention Within Buildings and Grounds	2	*	4	*	4	*	1	*	4	*	4	*	4	*	4	*
Safety and Accident Prevention on Way To and From School	2	*	6	*	4	*	3	*	3	*	2	*	3	*	6	*
School Lunch Facilities and Services	5	*	5	*	4	*	5	*	7	*	5	*	4	*	4	*
Average of Average Differences	5		7		6		5		6		5		5		6	

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]Groups in parentheses are not counted in determining the average of the average differences as these are sub-groups of a major group.

TABLE 81

THE COMPARISON OF THE GROUPS OF CRITERIA FOR HEALTHFUL SCHOOL LIVING JUDGED HIGHER BY ONE GROUP ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession	Type of Preparation			Length of Experience			Involvement
	Educators and Health Workers	Dual and Educ.	Dual and Health	Educ. and Health	Under 10 Yrs. and 10-19 Yrs.	Under 10 Yrs. and 20 Yrs. and More	10 - 19 Yrs. and 20 Yrs. and More	Group I and Group II
Health of School Personnel	.60 (educ.)	.82 (educ.)	.54 (dual)	.82 (educ.)	.91 (10 yr.)	.82 (10 yr.)	.64 (20 yr.)	.82 (I)
Emotional and Social Environment	.93 (educ.)	.94 (educ.)	.81 (health)	1.00 (educ.)	.75 (10 yr.)	.50	.87 (20 yr.)	.60 (II)
Physical Environment								
(Control Measures	.86 (health)	.77 (educ.)	.83 (health)	.50	.71 (10 yr.)	.67 (20 yr.)	.92 (20 yr.)	.79 (II)
(Environmental	1.00 (health)	.89 (educ.)	1.00 (health)	.50	.89 (10 yr.)	.75 (10 yr.)	1.00 (20 yr.)	.89 (II)[1]
(Practices	.60 (health)	.50	.50	.50	.60 (10-19yr.)	1.00 (20 yr.)	.80 (20 yr.)	.60 (II))
Safety and Accident Prevention Within Buildings and Grounds	.73 (health)	.75 (educ.)	.80 (health)	.56 (educ.)	.54 (10 yr.)	.70 (20 yr.)	1.00 (20 yr.)	.64 (II)
Safety and Accident Prevention On Way To and From School	.75 (educ.)	.88 (educ.)	.57 (health)	.83 (educ.)	1.00 (10 yr.)	.67 (10 yr.)	1.00 (20 yr.)	.88 (II)
School Lunch Facilities and Services	.81 (health)	.73 (dual)	.71 (health)	.86 (health)	.75 (10 yr.)	.70 (10 yr.)	.72 (20 yr.)	.53 (II)

[1]Groups in parentheses are sub-groups of a major group.

TABLE 82

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTH EDUCATION ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession		Type of Preparation						Length of Experience						Involvement	
	Educators and Health Workers		Dual and Education		Dual and Health		Education and Health		Under 10 Yrs. and 10-19 Yrs.		Under 10 Yrs. and 20 Yrs. and More		10 - 19 Yrs. and 20 Yrs. and More		Group I and Group II	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Planning and Conduct of Health Instruction	8	.68	9	.61	6	*	9	.70	7	*	8	.61	5	*	6	*
(Nature and Types of (Health Instruction	5	*	11	.78	7	*	8	.59	12	.33	10	.41	7	*	6	*)[1]
(Correlation with (Other Subjects	12	1.00	12	.80	4	*	11	1.00	5	*	7	*	3	*	6	*)
Personnel for Health Instruction	4	*	7	*	6	*	4	*	8	.56	7	*	5	*	5	*
(Teacher Involvement	5	*	9	1.00	3	*	9	1.00	8	.82	7	*	2	*	7	*)
(Health Personnel	3	*	7	*	6	*	3	*	8	.48	7	*	6	*	5	*)
Topical Content Areas	7	*	7	*	4	*	7	*	7	*	7	*	3	*	5	*
Average of Average Differences	6		8		5		7		7		7		4		5	
Professional Preparation	9	.93	10	.33	9	.63	11	.65	9	.80	12	.65	8	.57	5	*
Continuing Education	11	.52	16	.63	6	*	14	.63	7	*	6	*	7	*	11	.72
Average of Average Differences	10		13		7.5		12.5		8		9		7.5		8	

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.

[1]Groups in parentheses are not counted in determining the average of the average differences because they are sub-groups of a major group.

TABLE 83

THE COMPARISON OF THE GROUPS OF CRITERIA FOR HEALTH EDUCATION JUDGED HIGHER BY ONE GROUP ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession	Type of Preparation			Length of Experience			Involvement
	Educators and Health Workers	Dual and Educ.	Dual and Health	Educ. and Health	Under 10 Yrs. and 10-19 Yrs.	Under 10 Yrs. and 20 Yrs. and More	10 - 19 Yrs. and 20 Yrs. and More	Group I and Group II
Planning and Conduct of Health Instruction	.72 (health)	.76 (dual)	.50 (dual)	.65 (health)	.74 (10 yr.)[1]	.55 (10 yr.)	.63 (20 yr.)[2]	.53 (II)
(Nature and Types of (Health Instruction	.67 (health)	.71 (dual)	.67 (dual)	.67 (health)	.86 (10 yr.)	.50	1.00 (20 yr.)	.50)
(Correlation with (Other Subjects	1.00 (health)	1.00 (dual)	.60 (dual)	1.00 (health)	1.00 (10 yr.)	.80 (10 yr.)	.50	1.00 (II))
Personnel for Health Education	.82 (health)	.54 (educ.)	.50	.50	.80 (10 yr.)	.75 (10 yr.)	.64 (20 yr.)	.60 (I)
(Teacher Involvement	.67 (educ.)	.50	.67 (dual)	.67 (educ.)	.67 (10 yr.)	1.00 (10 yr.)	.50	.67 (II))
(Health Personnel	1.00 (health)	.56 (educ.)	.56 (health)	.57 (health)	.75 (10 yr.)	.67 (10 yr.)	.67 (20 yr.)	.71 (I))
Topical Content Areas	.89 (health)	.59 (dual)	.68 (health)	.77 (health)	.84 (10 yr.)	.89 (10 yr.)	.68 (10-19 yr.)[3]	.54 (I)
Professional Preparation	.89 (health)	.50	.78 (health)	.89 (health)	.78 (10-19yr.)	.89 (20 yr.)	.88 (20 yr.)	.63 (I)
Continuing Education	.90 (health)	.90 (dual)	.70 (dual)	.90 (health)	.50	.78 (20 yr.)	1.00 (20 yr.)	1.00 (I)

[1]Groups in parentheses are sub-groups of a major group.

TABLE 84

THE COMPARISON OF THE MEASURES OF AGREEMENT ON THE GROUPS OF CRITERIA FOR HEALTH SERVICES ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession		Type of Preparation						Length of Experience						Involvement	
	Educators and Health Workers		Dual and Education		Dual and Health		Education and Health		Under 10 Yrs. and 10-19 Yrs.		Under 10 Yrs. and 20 Yrs. and More		10 - 19 Yrs. and 20 Yrs. and More		Group I and Group II	
	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau	Av. Diff. Pct.	Tau
Nature of Health Services	6	*	8	.50	12	.40	5	*	9	.63	8	.55	5	*	6	*
Planning Health Services	14	.43	6	*	12	.72	15	.43	13	.95	10	.93	5	*	3	*
Health Service Personnel	7	*	10	.74	11	.50	8	.55	17	.75	12	.75	5	*	7	*
Health Appraisals	7	*	8	.39	7	*	8	.56	10	.61	10	.64	4	*	8	.78
Screening Tests	10	.52	7	*	10	.53	11	.61	9	.62	6	*	7	*	4	*
Medical Examinations	11	.75	8	.59	14	.71	14	.37	7	*	10	.73	6	*	5	*
Dental Health Services	8	.29	10	.57	5	*	10	.34	8	.59	12	.41	7	*	8	.42
Mental Health Services	7	*	10	.36	10	.50	8	.64	12	.38	12	.41	5	*	4	*
Cumulative Health Records	11	.54	10	.67	5	*	10	.67	13	.83	12	.69	9	.69	7	*
Counseling and Follow-Up	6	*	9	.38	10	.25	7	*	10	.21	10	.32	5	*	5	*
Communicable Disease Control	9	.46	9	.31	8	.44	10	.25	10	.38	7	*	6	*	5	*
First Aid and Emergency Care	10	.52	6	*	9	.26	11	.34	10	.28	7	*	7	*	6	*
Facilities for Health Services	2	*	17	1.00	11	1.00	1	*	0	*	6	*	6	*	2	*
Exceptional Pupils	5	*	9	.61	7	*	5	*	14	.55	16	.50	5	*	8	.84
Average of Average Differences	8		9		9		9		11		10		6		6	

*The value is not meaningful because the average difference is not large enough to make the rankings relatively stable.
[1]These are related groups rather than sub-groups.

TABLE 85

THE COMPARISON OF THE GROUPS OF CRITERIA FOR SCHOOL HEALTH SERVICES JUDGED HIGHER BY ONE GROUP ACCORDING TO PROFESSION, TYPE OF PREPARATION, LENGTH OF EXPERIENCE, AND RANGE OF INVOLVEMENT

Group of Criteria	Profession	Type of Preparation			Length of Experience			Involvement
	Educators and Health Workers	Dual and Educ.	Dual and Health	Educ. and Health	Under 10 Yrs. and 10-19 Yrs.	Under 10 Yrs. and 20 Yrs. and More	10 - 19 Yrs. and 20 Yrs. and More	Group I and Group II
Nature of Health Service	.62 (health)	.86 (educ.)	.81 (health)	.56 (health)	.93 (10 yr.)	.80 (10 yr.)	.56 (10-19 yr.)[2]	.79 (I)[3]
Planning of Health Services	.80 (health)	.67 (educ.)	.86 (health)	.67 (health)	1.00 (10 yr.)	.86 (10 yr.)	.86 (20 yr.)[4]	.57 (II)
Health Service Personnel	.83 (health)	.67 (educ.)	.67 (health)	.83 (health)	1.00 (10 yr.)	.83 (10 yr.)	.67 (20 yr.)	.67 (II)
Health Appraisals	.58 (health)	.50	.67 (health)	.50	.92 (10 yr.)	.92 (10 yr.)	.55 (10-19 yr.)	.75 (I)
Screening Tests	1.00 (health)	.57 (dual)	.93 (health)	.93 (health)	.87 (10 yr.)	.73 (10 yr.)	.79 (20 yr.)	.60 (I)
Medical Examinations	.83 (health)	.75 (educ.)	.88 (health)	.63 (health)	.88 (10 yr.)	.63 (10 yr.)	.63 (20 yr.)	.83 (II)
Dental Health Services	.75 (health)	.75 (dual)	.63 (dual)	.88 (health)	.75 (10 yr.)	.75 (10 yr.)	.75 (10-19 yr.)	.63 (I)
Mental Health Services	.88 (health)	.73 (educ.)	.88 (health)	.75 (health)	.60 (10 yr.)	.63 (10 yr.)	.57 (20 yr.)	.77 (II)
Cumulative Health Records	.56 (educ.)	.89 (educ.)	.75 (health)	.67 (educ.)	.89 (10 yr.)	.62 (10 yr.)	.62 (20 yr.)	.71 (II)
Counseling and Follow-Up	.73 (health)	.69 (educ.)	.88 (health)	.60 (health)	.82 (10 yr.)	.82 (10 yr.)	.60 (20 yr.)	.50
Communicable Disease Control	.50	.67 (educ.)	.58 (health)	.60 (health)	.65 (10 yr.)	.58 (10 yr.)	.58 (20 yr.)	.55 (I)
First Aid and Emergency Care	.80 (health)	.64 (dual)	.79 (health)	.73 (health)	.53 (10 yr.)	.73 (10 yr.)	.73 (10-19 yr.)	.79 (I)
Facilities for Health Services	1.00 (educ.)	1.00 (educ.)	1.00 (health)	1.00 (educ.)	.00	.50	.50	.50
Exceptional Pupils	.67 (health)	.50	.64 (health)	.67 (health)	.64 (10-19 yr.)	.64 (20 yr.)	.73 (10-19 yr.)	.91 (I)

[1] Under 10 years of experience.
[2] 10-19 years of experience.
[3] Group I
[4] 20 years and more of experience.
[5] Group II

APPENDIX L

THE GUIDING PRINCIPLES AND CRITERIA ENDORSED BY BOTH PROFESSIONAL GROUP

THE GUIDING PRINCIPLES AND CRITERIA ENDORSED BY BOTH PROFESSIONAL GROUPS

THE SCHOOL HEALTH PROGRAMME SHOULD PROVIDE FOR THE UNDERSTANDING, PROTECTION, PROMOTION AND RESTORATION OF THE PHYSICAL, EMOTIONAL AND SOCIAL HEALTH OF STUDENTS AND STAFF MEMBERS THROUGH HEALTHFUL SCHOOL LIVING, HEALTH EDUCATION AND SCHOOL HEALTH SERVICES. (A.1)

The school health programme should strengthen and supplement parental responsibility and family medical and dental supervision. (A.1)

The school health programme should be coordinated with the appropriate public health programmes. (A.2)

The school health programme should be based on the expressed, observed and anticipated health needs of students. (A.3)

School health policies and procedures should provide direction for the programme, and be interpreted to teachers and other school personnel, to related professional groups, and to parents. (A.6)

THE SELECTION OF HEALTHY SCHOOL PERSONNEL AND SUBSEQUENT ASSESSMENT, PROTECTION AND PROMOTION OF THEIR HEALTH SHOULD BE FUNDAMENTAL TO THE PROVISION OF HEALTHFUL SCHOOL LIVING. (B.II)*

Sick leave provisions should be liberal enough to encourage school personnel to remain home when ill. (B.2)

An adequate number of substitute teachers should be available to encourage teachers to use sick leave when ill. (B.3)

THE ENTIRE SCHOOL PROGRAMME SHOULD PROMOTE AN ENVIRONMENT FAVOURABLE TO THE EMOTIONAL AND SOCIAL HEALTH OF PUPILS AND STAFF. (B.III)

The school should foster opportunities for the development of

---

*The guiding principles are capitalized.

good interpersonal relationships among students, among staff members, between staff members and students, and between staff members and parents. (B.4)

The teacher should understand home and community influences in order to work effectively with pupils with specific health problems. (B.6)

Administrative policies relating to pupil conduct should recognize that each pupil in trouble should be studied and helped. (B.9)

THE ENTIRE SCHOOL PLANT (CONSISTING OF SITE, BUILDINGS AND EQUIPMENT) AND SERVICES SHOULD BE CONDUCIVE TO THE HEALTH AND SAFETY OF PUPILS AND STAFF. (B.IV)

In the selection of a school site consideration should be given to factors likely to influence health and safety. (B.12)

Construction and maintenance of school buildings should be in accordance with, or superior to, minimum required standards with regard to a safe water supply, safe drinking water, heating and ventilation and their continual control, lighting and its control, lavatory and toilet facilities and supplies, and sanitary garbage disposal. (B.13)

When improvements are indicated as a result of such inspections the medical officer of health and/or the public health inspector should send a written report to the educational administrator and the local board of education. (B.15)

Seating should be adjusted regularly to meet the individual needs of the pupils. (B.16)

Pupils should aid in the maintenance of the cleanliness and neatness of classrooms, tiolets and lavatories. (B.17)

The possibility of accidents and fires in the schools should be minimized through design of the plant, the provision of good equipment, inspection on a regular basis, proper maintenance, and a planned programme of fire and accident prevention.(B.18)

Safety measures in physical education programmes, in laboratories and in shops should be given special attention through the provision of safe facilities, the use of the best protective equipment, instruction, careful supervision of the students, and through development of habits of safety. (B.19)

In promoting safety, the services of the police and fire departments should be utilized. (B.20)

Pupils should participate in the maintenance of standards of safety and fire prevention. (B.21)

With regard to traffic safety, traffic problems in the school area should be controlled in so far as possible, and school zones should be clearly marked. (B.22)

All school buses should meet, or exceed, legal minimum standards for the transportation of pupils, should be maintained in safe operating condition, should be manned by bus drivers qualified for such driving, and in good physical and mental health. (B.23)

WHEN PUPILS CANNOT RETURN HOME FOR LUNCH THE PROVISION OF SCHOOL LUNCH FACILITIES AND SERVICES SHOULD BE IMPORTANT PARTS OF HEALTHFUL SCHOOL LIVING, SHOULD CONTRIBUTE TO GOOD NUTRITION, AND SHOULD PROVIDE IMPORTANT LEARNING EXPERIENCES. (B.V)

When students bring lunches there should be adequate storage facilities for the lunches, and a sanitary place to eat lunch.(B.24)

School lunchrooms should be large enough for students to eat lunch there whether they buy lunch or bring it from home. (B.25)

Lavatories and toilets should be located near lunchrooms to promote handwashing before eating. B.26)

If food is prepared, cooked and served in the school there should be required minimum standards with respect to the quality of the food, selection according to Canada's Food Guide, an adequate quantity of food, the storage of food, refrigeration, preparation, cooking, serving, dishwashing, and waste disposal. (B.27)

An adequate number and type of foodhandlers should be employed, should be instructed in sanitary foodhandling and personal health practices, and should be provided with toilet and lavatory facilities. (B.29)

HEALTH EDUCATION SHOULD UTILIZE AND PROVIDE LEARNING EXPERIENCES FOR THE PURPOSE OF FAVOURABLY INFLUENCING UNDERSTANDINGS, ATTITUDES AND HABITS RELATED TO INDIVIDUAL, FAMILY AND COMMUNITY HEALTH AND SAFETY. (C.VI)

An individual or group of individuals with specific qualifications in health education should be delegated responsibility for the overall planning of health education within the school system. (C.2)

In junior high and high schools the responsibility for health instruction should be delegated to teachers with special preparation in health education. (C.5)

Each teacher, no matter what his subject area, should have concern for the individual health needs, interests and health guidance of his pupils. (C.6)

Professional health personnel should assist school personnel in determining health needs and objectives, in assessing the scientific accuracy of instructional content and teaching materials, and in curriculum development. (C.7)

Such professional health personnel should include staff members involved in the school health services. (C.8)

Health instruction should be correlated with instruction in other subject matter fields such as physical education, science, and home economics. (C.11)

Informal and more incidental health teaching in relation to daily activities should supplement systematically organized health teaching. (C.12)

Individual health guidance in relation to health needs and practices should supplement systematically organized health teaching. (C.13)

The following topics should be considered as content areas in curriculum planning in relation to the needs and age-grade levels of the pupils:

- Growth, structure and functions of the human body.
- Consumer health education: the need for health care, the reliability of sources of health information and the selection of health services and products.
- Nutritional needs, good food habits, and desirable social practices and attitudes.
- Dental development and dental care.
- First aid procedures.
- Safety practices for the prevention of, and protection from, accidents.
- Causes and prevention of important non-communicable diseases.
- Causes and prevention of important communicable diseases.
- Family living: adolescent changes, the value of the family system, preparation for marriage and family life (in senior high grades), and recognition that the family has the primary responsibility for this teaching.
- Factors affecting mental and emotional health.
- The nature of physical fitness and the need for exercise, rest and recreation to maintain it.
- The emotional, social and physical aspects of: smoking, alcohol, drugs, and chemicals and toxins in the environment. (C.14)

The objectives and methods of health teaching should stimulate active participation of the pupils in the learning experiences, and should stress the use of health information. (C.15)

Up-to-date, authoritative and accurate materials and audio-visual aids from a wide range of courses should be readily available to teachers and pupils. (C.17)

Classroom space for health teaching should be comparable to that for other subjects, and should be adequate for the storage of models, charts and experimental equipment. (C.18)

ALL PERSONNEL INVOLVED IN THE SCHOOL HEALTH PROGRAMME SHOULD BE ADEQUATELY PREPARED AND ENCOURAGED TO PARTICIPATE IN CONTINUING EDUCATION PROGRAMMES. (C.VII)

Specialized health personnel should be certified or licensed in their respective fields of competence. (C.20)

Special preparation for health teachers for junior high and senior high schools, in an undergraduate programme in physical and health education, or its equivalent, in the health sciences, should include work in the biological sciences and in the social sciences. (C.22)

Special preparation for health teachers for junior and senior high schools should include professional health courses in teacher preparation in order to meet the minimum requirements of the provincial department of education for specialist standing. (C.23)

All new professional health personnel to serve schools should become acquainted with the administrative and instructional programmes and problems of the schools through pre-service or orientation programmes. (C.24)

All new administrators and teachers should become acquainted with the public health programmes and problems during pre-service or orientation programmes. (C.25)

A variety of in-service educational programmes should provide opportunities for professional health personnel, administrators and teachers to become better informed about new developments in knowledge, in skills and techniques, and in materials and methods. (C.26)

SCHOOL HEALTH SERVICES SHOULD BE ORGANIZED TO PROTECT, PROMOTE AND RESTORE THE HEALTH OF STUDENTS AND STAFF, TO ASSIST IN ADAPTING THE EDUCATIONAL PROGRAMMES TO THE MENTAL AND PHYSICAL ABILITIES AND NEEDS OF PUPILS, AND TO UTILIZE FULLY THE COMMUNITY RESOURCES TO MEET THE HEALTH NEEDS OF CHILDREN AND YOUTH WITHOUT GAPS OR DUPLICATION OF FACILITIES AND SERVICES. (D.VIII)

All school health services should provide positive learning ex-

periences for the students and be utilized in health teaching.(D.1)

School health services should make provisions to appraise the health status of pupils; to encourage and facilitate the correction of remediable defects; to assist the pupil to adjust to non-remediable defects; to counsel students; to counsel parents, through home visiting when indicated; to help prevent and control disease; to plane for the emergency care of injured and severely ill students and staff members; to assist in the identification of exceptional (handicapped) pupils; in planning for the health supervision of exceptional (handicapped) children; in adapting the school programme to meet the needs of exceptional (handicapped) pupils; and to make provisions to coordinate the community resources to meet the health needs of pupils. (D.2)

Specialized health personnel should be available on an adequate time basis related to the needs of the students, and to the community health problems. (D.3)

Health appraisal procedures should include the teachers' observations and referrals, screening tests, the utilization of cumulative health records, counseling, and follow-up procedures for students with suspected or known defects. (D.7)

Individual teacher-nurse conferences should be held regularly to share information about the health status of pupils including reports of screening procedures and examinations. (D.9)

In large schools, a liaison committee, composed of such persons as the principal, vice-principal, school health physician, public health nurse, guidance director, physical and health education directors and other appropriate individuals should function to facilitate exchange of information, and joint planning. (D.11)

Adequate preparation for screening tests should include preparation of pupils, teachers, and parents. (D.12)

Vision screening tests should be provided with a lighted Snellen chart (and/or other methods approved by the provincial department of health,) for all pupils referred by self, teacher, and/or parents, for all pupils at appropriate intervals, including colour vision screening once in an upper grade of elementary school. (D.13)

Hearing should be screened with a pure tone audiometer (and/or other methods approved by the provincial departments of health), for all pupils referred by self, teacher and/or parent with suspected hearing loss or speech defect, and for all pupils at appropriate intervals. (D.14)

Tuberculin tests should be provided for all students with unknown or negative reactions at appropriate intervals. (D.16)

All positive reactors to the tuberculin test should be given a chest x-ray at once, repeated at intervals dependent upon the findings. (D.17)

Medical examinations provided in the school health services should be of a quality to command medical respect, to provide sufficient information to guide counseling of pupils and parents, and to provide a desirable learning experience for the pupil. (D.24)

The dental health services should be preventive and educational in nature. (D.25)

School dental inspections should be utilized to estimate group dental needs. (D.28)

Pupils should be referred to the family dentist or dental clinic for routine dental examinations and correction of dental defects. (D.29)

If no public dental clinic is available, dental treatment should be provided for, or arranged for, pupils whose families are not able to obtain dental treatment privately. (D.30)

Dental emergencies that occur when the dental staff members are in the school should be given temporary, palliative treatment, if necessary, and referred to the family dentist or dental clinic. (D.31)

Provisions for identifying, assessing and securing help for students with emotional, social and behaviour problems should include psychological examinations and evaluations, social evaluation of the pupil and his home, counseling pupil and parents. (D.32)

The services of child guidance clinics and/or mental health clinics should be available for any student in need of further assessment and therapy. (D.34)

School health personnel should participate in the procedures of child guidance clinics and mental health clinics in referral, in preparation of the social evaluation (case history), in case conferences, and in follow-up procedures. (D.35)

Parents should be encouraged to provide information about the health history of the child and family during the school registration conference or preschool medical examination and following any subsequent illness. (D.37)

The cumulative school health record should accompany the pupil from grade to grade, and from school to school. (D.38)

Teachers should have the opportunity to contribute significant information to these health records. (D.40)

Counseling and follow-up procedures should involve pupils and parents, teachers and administrators. (D.41)

Counseling and follow-up procedures should focus on the significance of appraisal findings, the need for further examination and/or treatment, the utilization of community resources to assist in the provision of needed assessment and/or treatment, and helping the pupil to accept responsibility for his own health. (D.42)

There should be a plan to facilitate reporting from the family physician and dentist to the school health services to coordinate efforts to assist the pupil and his family. (D.44)

Health counseling by the school health physician, public health nurse, guidance counselor, homeroom teacher and others should be coordinated. (D.45)

The school health physician and the public health nurse should initiate follow-up steps to ensure necessary medical care for all pupils whose parents are unable to provide it. (D.46)

The correction of defects should be appraised on an individual basis. (D.47)

The school should contribute to the prevention, detection and control of communicable diseases through the application of policies and procedures determined jointly by the departments of health and departments of education, and interpreted to, and understood by local physicians, and parents. (d.48)

The local health department should provide each school with a list of reportable communicable diseases, with a list of non-reportable communicable diseases, with copies of official regulations concerning isolation, quarantine and exclusion. (D.51)

Reinforcing immunization and vaccination programmes should be provided in schools at approximately five-year intervals with appropriate antigens (i.e., toxoids and vaccines) depending upon the age of the pupil. (D.52)

School personnel should encourage parents to keep pupils at home when genuinely ill. (D.55)

The school should cooperate in the execution of specific public health regulations and recommendations for the control of diseases spread by insects and animals. (D.56)

There should be a planned program of tuberculosis prevention, detection and control for all pupils and for all school personnel. (D.57)

The medical officer of health should provide medical consultation to the educational administrator and the local board of education in the development of, and periodic assessment of, a planned programme of first aid and emergency care. (D.58)

The medical officer of health should provide a list of first aid supplies, advice regarding the location and upkeep of first aid kits, and a guide for first aid and emergency procedures. (D.59)

The provision of emergency care and first aid for students and staff members should be primarily a responsibility of the school administration with the assistance of a professional health personnel, if in the school, at the time of a serious emergency. (D.60)

School personnel should limit their first aid and emergency measures to those defined in the above mentioned guide. (D.61)

The first aid and emergency procedures should be interpreted to parents. (D.64)

Detailed information should be obtained from all staff members, and from parents for all pupils, at the beginning of each school year, to facilitate locating the parent or guardian, and using the physician and hospital of choice in an emergency. (D.65)

The school plant should be planned, and specific procedures established for the protection of pupils in the event of likely or possible natural types of disaster such as fire, flood, tornado, or blizzard, striking the school or community. (D.66)

Each school should have an accident record form to be completed on every accident, and to be reviewed periodically in terms of accident prevention measures. (D.67)

The school health room or suite should provide adequate space and facilities to administer the school health services carried on within the school. (D.68)

This room or suite should be located where it can be supervised by a member of the school staff when not under the supervision of a member of the professional health staff. (D.69)

The local medical officer of health, or the school health physician, should provide medical consultation to the educational administrator and the special education personnel regarding the planning and conduct of the total programme for exceptional pupils. (D.70)

There should be appropriate adaptations of the school programme to meet the health needs of some of the exceptional pupils. (D.72)

BIBLIOGRAPHY

This bibliography does not include most of the references listed in the sources of the guiding principles and criteria, nor in the annotated bibliography on the development of the school health program, although many of these references were used as references for the entire study.

BIBLIOGRAPHY

Public Documents

Canada. Dominion Bureau of Statistics. Canada Year Book 1965. Ottawa: Queen's Printer, 1965.

_____.Dominion Bureau of Statistics. Canada Year Book 1964. Ottawa: Queen's Printer, 1964.

_____.Dominion Bureau of Statistics. Preliminary Statistics of Education 1964 - 65. Ottawa: Education Division, Dominion Bureau of Statistics, 1965.

_____.Dominion Bureau of Statistics. Canada 1965-66. Ottawa: Queen's Printer, 1965.

_____.Dominion Bureau of Statistics. A Graphic Presentation of Canadian Education. Ottawa: Education Division, Dominion Bureau of Statistics, 1961.

Davis, William G. Building an Educated Society 1816-1966. Statements to the Legislative Assembly of Ontario, June 1966. Toronto: Queen's Printer, 1966.

Final Acts of the International Health Conference. New York: United Nations, Lake Success, 1946.

Ontario. An Act to Amend the Municipality of Metropolitan Toronto Act. Given Royal Assent, May 18, 1966.

United States of America. Children's Bureau. Some Guide Lines for Evaluation Research. E. Hertzog (ed.) Washington, D.C.: U.S. Government Printing Office, 1959.

World Health Organization. Constitution. Geneva: World Health Organization, 1960.

_____. Expert Committee on School Health Services. Technical Report Series No. 30. Geneva: World Health Organization, 1951.

_____. Second Report of the Expert Committee on Maternal and Child Health: Administration of Maternal and Child Health Services. Technical Report Series No. 115. Geneva: World Health Organization, 1957.

Books

Blishen, Bernard et al. Canadian Society: Sociological Perspectives. Toronto: The Macmillan Co., 1961.

Brockington, Fraser. World Health. London: Penguin Books Ltd., 1958.

Elkin, Frederick. The Family in Canada. Ottawa: The Canadian Conference on the Family, 1964.

English, Horace V., and English, Ava Champney. A Comprehensive Dictionary of Psychological and Psychoanalytical Terms. New York: McKay Publishing Co., 1958.

Freeman, Ruth B., and Holmes Edward M. Administration of Health Services. Philadelphia: W.B. Saunders Co., 1960.

Davis, James A. Education for Positive Mental Health. Chicago: Aldine Publishing Co., 1965.

Elementary Evaluative Criteria. Boston: School of Education, Boston University, 1953.

Gilbert, Jules. Education Sanitaire - Théorie et Pratique. Paris: Masson and Cie, 1959.

_____ L'éducation Sanitaire. Montreal: Les Presses de l'Universite de Montreal, 1963.

Good, Carter V. Dictionary of Education. 2nd ed.; New York: McGraw-Hill Book Co., 1959.

Kendall, Maurice G. Rank Correlation Methods. 2nd ed.; London: Charles Griffin and Co. Ltd., 1955.

Laskin, Richard. Social Problems: A Canadian Profile. New York: McGraw-Hill Company, 1964.

Moore, Brian and the Editors of Life. Canada. New York: Time Incorporated, 1963.

Stewart Freeman K. (ed.). The Aims of Education. Ottawa: Canadian Conference on Education, 1961.

The Shorter Oxford English Dictionary. 3rd ed.; Oxford: Clarendon Press, 1959.

Webster's Seventh New Collegiate Dictionary. Springfield, Mass.: G. & C. Merriam Co., 1963.

Articles and Periodicals

American Public Health Association Technical Development Board. "A Broadened Spectrum of Health and Morbidity," American Journal of Public Health, LI(February, 1961), pp. 287-291.

Bierman, Jessie M., "Research in School Health - Focus on the Future," California's Health. XVI (January 1, 1959), pp. 97-100.

Bissell, Dwight M. "The Philosophy of Public Health," California's Health, XX (August 15, 1962), pp. 25-28.

Brightman, I.J. "Problems in Interdisciplinary Coordination and Communication," Ann. New York Academy Science, LXXIV. (September, 1958), pp. 35-39.

Brown, H.K. "Where are We Going with Dental Health Programs?" Canadian Journal of Public Health. XLVIII (July, 1957), pp. 282-83.

Committee on Terminology, "Terminology" Journal of Health, Physical Education and Recreation, XXII (October, 1950) pp. 14-16.

Committee on Terminology, "Terminology," Journal of Health, Physical Education and Recreation, XXXIII (November, 1962) pp. 27-28.

Evaluation Instruments in School Health Education, "Journal of Health, Physical Education and Recreation, XXVI (November, 1955), pp. 13-14.

Gabrielson, Ira W., Levin, Lowell S., and Ellison, Margaret D. "Factors Affecting School Follow-Up." American Journal of Public Health, LVII (January, 1967), pp. 48-59.

Getting, Vlado A."Evaluation, Part II,"American Journal of Public Health. XLVII (April, 1957), pp. 409-412.

"Glossary of Administrative Terms in Public Health," American Journal of Public Health, L (February, 1960). pp. 225-26.

Grossman, Jerome, "Overcoming Barriers to Effective Evaluation of Education in Public Health Programs," California's Health, XIX (December 15, 1961), pp. 81-83.

Guthrie, Eugene L., Schultz, Carl S., and Davis, Roy L. "Research Needs and Bottlenecks in School Health, American Journal of Public Health, LI (October, 1961), pp. 1525-31.

Hagen, Elizabeth F., and Thorndike, Robert L. "Evaluation," Encyclopedia of Educational Research, edited by Chester Harris, New York: Macmillan Co., 1960, pp. 482-486.

Hilleboe, Herman E. "Improving Performance in Public Health," Public Health Reports, LXXIX (January, 1964) pp. 45-46.

Hollister, William G. "Some Problems of Strategy in Providing School Mental Health Services," American Journal of Public Health, LIII (September, 1963) pp. 1447-51.

Hunter, Trenna G., and Gundry, C.H. "School Health Practices: Ritualistic or Purposeful?," Canadian Journal of Public Health, XLVI (January, 1955) pp. 9-14.

James, George. "Research by Local Health Departments: Problems, Methods, Results," American Journal of Public Health, XLVIII (March, 1958) pp. 353-61.

_____ "Evaluation in Public Health Practice," American Journal of Public Health, LII. (July, 1962, pp. 1145-54.

James, George. "The Coming Era in Health Education." Paper read before the meeting of the Society of Public Health Educators as the First Mona B. Shackman Lecture in Public Health Education. New York: Society of Public Health Education, n.d.

Josephi, Marion G., and Blum, Henrik L. "School Health Education Can be Evaluated,", California's Health, XVI (September 1, 1958, pp. 33-37.

Joint Committee on Evaluation of School Health Programs, School Health Section, American Public Health Association, "Evaluate Your School Health Program," Journal of School Health, XXVI, (June, 1956) pp. 167-174.

Ohio Department of Health, "Ohio's Check List for Evaluating the School Health Program," Ohio's Health, IV (August 1952).

Kohn, Robert, "Health Objectives for the Evaluation of Health Services and Operational Research," Canadian Journal of Public Health, LVII (January, 1966), pp. 13-17.

_____ "Volume of Illness," Canadian Journal of Public Health, XLVIII (August, 1956), pp. 332-342.

Marshall, Joseph M. "Teacher Preparation in Health and Health Education in Canada," Canadian Journal of Public Health, LVII (October, 1966) pp. 458-462.

Ontario Institute for Studies in Education. "Canada's First International Seminar in Philosophy and Education." Canadian School Journal, XLIV (April, 1966), pp. 26-27.

Phair, J.T., Brown, W.G., and Nichols, W., "Public Health Services and Staff Requirements," Canadian Journal of Public Health, XLVII, (January 1956), pp. 1-5.

Phillips, A.J. "A Five-Year Program in School Health Research," Canadian Education, V (June, 1950), pp. 1-12.

Robinson, F.G. "Educational Trends and Change, "Canadian School Journal, XLI (January-February, 1964, pp. 66-70.

Russell, B. "School Health Attendants," Canadian Journal of Public Health, LI (November, 1960), pp. 462-63.

Schwenger, Cope E.,"A Philosophy of Public Health," Canadian Journal of Public Health , LIV (May, 1963) pp. 227-31.

_____ "Evaluation of the Local Health Program," Canadian Journal of Public Health, LII (April, 1961), pp. 145-150.

Shaw, John H. "Evaluation in the School Health Instructional Program, " American Journal of Public Health, XLVII (May, 1957) pp. 582-86.

Wallace, Helen M. and Starr, Helen M. "School Services for Handicapped Children in Urban Areas," American Journal of Public Health, L (February, 1960) pp. 173-180.

Webb, Jean F. Report of the School Health Committee, Canadian Journal of Public Health, LVII (September, 1966), pp. 426-27.

Yankauer, A., et al. "A Study of Periodic School Medical Examinations: IV. Education Aspects, American Journal of Public Health, LI (October, 1961, pp. 1532-40.

Reports

American Public Health Association, Committee on Administrative Practice. Appraisal Form for City Health Work. 1st ed., 1925; 2nd ed., 1943, New York: the Association.

Appraisal Form for Local Health Work. New York: The Association, 1938.

Evaluation Schedule for Use in the Study and Appraisal of Community Health Programs, New York: The Association, 1947.

Guide to a Community Health Study. 2nd ed., New York: The Association, 1961.

Cooperative Study of Secondary School Standards. Educational Temperatures. Washington, D.C: Cooperative Study, 1939.

How to Evaluate a Secondary School. Washington, D.C: Cooperative Study, 1940.

Evaluative Criteria 1950 Edition. Washington, D.C.: Cooperative Study, 1950.

Lamb, Silvia, and Solomon, David N. The Social Behaviour Surrounding Children's Health Problems, Report for the Canadian Conference on Children. Toronto: The Canadian Conference on Children. 1965.

Metropolitan Toronto School Board. The Case for Equalization of Educational Opportunity in Metro Toronto. Toronto: The Board, 1962.

National Study of Secondary School Evaluation. Evaluative Criteria 1960 Edition. Washington, D.C.: National Study, 1960.

_____. Evaluative Criteria for Junior High Schools. Washington, D.C. National Study, 1963.

Report of the Committee on School Health of the American Academy of Pediatrics. Evanston, Ill.: The Academy, 1966.

Report of the NEA Project on Instruction. Schools for the 60's, New York: McGraw-Hill, 1963.

Superintendent of Public Instruction. A Check List for Surveying the Secondary School Health Program. Bulletin 340 Lansing, Mich.: Department of Public Instruction, 1946, pp. 16.

_____, Self-Appraisal of the Health Program in Michigan Schools. Lansing, Mich.: Department of Public Instruction, n.d., pp.29.

Texas Education Agency. A Check List: Appraising the Elementary and Secondary School Health Program. Austin, Texas: Texas Education Agency, 1951, pp. 28.

Unpublished Material

Anderson, Gordon Wilcox. "An Evaluation of the Coordination Status of Health Programs in and among Eight Selected Central Schools of Broome County, New York. Unpublished doctoral dissertation, New York University, 1961.

Beyrer, Mary K. "The Significance of Current Trends in School and College Health Programs." Unpublished doctoral dissertation, Ohio State University, 1959.

Bonner, Edward. "Measuring and Scoring Selected Environmental Factors that Affect the Physical Health of Elementary School Children." Unpublished doctoral dissertation, Ohio State University, 1959.

Boyd, Clifford Allen. "A Determination of Concepts of Healthful Living and their Relative Importance for a General Course in College Health." Unpublished doctoral dissertation, University of Utah, 1958.

Borland, M. Joan and Rosen, Rheta. A study of the Health Referral Process in the Scarborough Schools, 1966. (Mimeographed.)

Fogoros, Letitia Marguerite, "Determination of Elements Desirable for a Course in Family Life Education for the Senior Year in High School." Unpublished doctoral dissertation, University of Michigan, 1961.

Cavanagh, D.A. "Programmed Instruction and Productivity." Paper read before the meeting of the Central Canada Chapter of the National Society for Programmed Instruction, Toronto, October 13, 1966.

Galarneaux, Arthur F. "The Selection, Development and Objective Evaluation of Tobacco Smoking Concepts as an Aid to Curriculum Construction." Unpublished doctoral dissertation Boston University, 1957.

Giovannangeli, Arthur J. "The Selection, Development and Objective Evaluation of Tobacco Smoking Concepts as an Aid to Curriculum Construction." Unpublished doctoral dissertation, Boston University, 1954.

Getting, Vlado A. " Program Planning, Implementation and Evaluation." Paper read before Eighth Annual Refresher Course School of Hygiene, University of Toronto, February 5, 1965.

Huffman, Verna M. "A Study of the Activities of Nursing Personnel in Sic Health Units and Municipal Health Departments in One Province of Canada. A report to the Research Committee of The Canadian Public Health Association, 1966. (Mimeographed.)

Kirk, Robert Henry, "An Instrument for Evaluating College and University Health Service Programs." Unpublished doctoral dissertation, Indiana University, 1962.

Lehker, Roland John. "Criteria for the Evaluation and Accreditation of Junior High Schools." Unpublished doctoral dissertation, University of Michigan, 1964.

Merrill, Charles D. "A Determination of Concepts of Healthful Living Which are of Functional Value in Contributing to the General Education of Elementary School Pupils." Unpublished doctoral dissertation, Boston University, 1949.

Newfoundland Department of Education. Health Education of the School Child, Part II of a Brief to the Royal Commission on Education and Youth. St. John's: The Department, 1965. (Mimeographed.)

_____. School Medical Services, Part III of a Brief to the Royal Commission on Education and Youth, 1965. (Mimeographed.)

_____. Education of the Handicapped, Part IV of a Brief to the Royal Commission on Education and Youth, 1965. (Mimeographed.)

Nix, Margaret E. "Teachers' Concepts of a School Health Program." Unpublished doctoral dissertation, University of Michigan, 1953.

Procedures for Evaluating Health Programs, developed by the Research Program "Evaluation of Public Health Practices." Department of Community Health Services, School of Public Health, University of Michigan, 6th rev.: Ann Arbor, Mich.: School of Public Health. November 19, 1965. (Mimeographed.)

Report of First National Conference on Evaluation in Public Health. Ann Arbor, Mich.: University of Michigan School of Public Health, 1955.

Report of Second National Conference on Evaluation in Public Health Ann Arbor, Mich.: University of Michigan, School of Public Health, 1960.

Rosenstock, Irwin M. "Planning for Program Evaluation: Criteria, Methods and Techniques." Paper read at "Executive Process in Public Health Administration Conference. School of Public Health, University of Michigan, May 5, 1966.

Staton, Wesley M. "A Determination of Fundamental Concepts of Healthful Living and Their Relative Importance for General Education at the Secondary Level." Unpublished doctoral dissertation, Boston University, 1948.

Watters, Ray. "An Evaluation Instrument for the School Health Service Program." Unpublished doctoral dissertation, Indiana University, 1960.

Wilson, Harrison Benjamin. "An Instrument for Evaluating Health Instruction in Secondary Schools, Grades 9-12." Unpublished doctoral dissertation, Indiana University, 1960.

Other Sources

Culbert, Robert W. Personal Interview, October 1, 1965.

Deeks, Mrs. J. Personal Interview, Scarborough, October 6, 1966.

James, George. Personal Interview, Toronto September 30, 1964.

Rash, J. Keogh. Personal Interview, New York City, October 3, 1965.

Wride, G.E. Personal Interview, Ottawa, April 13, 1965.