IMPLEMENTATION OF THE NORTHWEST TERRITORIES SCHOOL HEALTH CURRICULUM

BY

SHARON ELAINE KIRWAN

A Thesis

Submitted to the Faculty of Graduate Studies

Partial Fulfullment of the Requirements for the

Degree of

MASTER OF EDUCATION

Department of Mathematics and Natural Sciences

University of Manitoba

Winnipeg, Manitoba

1991

ISBN 0-315-86110-X

IMPLEMENTATION OF THE NORTHWEST TERRITORIES SCHOOL HEALTH CURRICULUM

BY

SHARON ELAINE KIRWAN

A thesis submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements of the degree of

MASTER OF EDUCATION

ABSTRACT

This study described the extent to which the Northwest Territories School Health Curriculum had been implemented effective June 1990. Fullan's 15 factors were applied in the study of 6 schools in 3 communities in the Northwest Territories (N.W.T.), Canada.

The implementation status of this mandatory school health curriculum was assessed by interviewing persons directly involved in teaching school health, and by checking the availability of the curriculum materials.

Three of the most significant findings were: the teachers found the curriculum materials appropriate and easy to use; the complete curriculum was not readily available in the schools; and the teachers and principals had received little orientation, inservice and ongoing support relating to the school health curriculum.

A number of recommendations were made for improving the implementation of the N.W.T. School Health Curriculum. Recommendations were also made for any future comprehensive evaluation of the curriculum.

ACKNOWLEDGEMENTS

I would like to thank the members of my thesis committee Dr. Peter Spencer, Dr. Dennis Hlynka, and Dr. Dexter Harvey, of the Faculty of Education for the time they gave to this study. I would like to add a special thank you to Dr. Dexter Harvey, my principal advisor, for challenging me to explore a wider vision of health than my previous experience provided.

I am grateful to Helen Balanoff, of the Government of the Northwest Territories Department of Education, for paving the way for that department's approval of, and cooperation in, the study. A thank you to the northern teachers, principals, and educational consultant who gave of their time and demonstrated yet again real northern hospitality.

To Simone and Sheryl, the lights of my world, a thank you for enduring their mothers return to school. A thank you to Christine for keeping our household functioning during this time. As well, a thank you to my husband Sydney, for his enduring support in my educational endeavours, and especially in the editing of this study.

Table of Contents

Appendices

1. Legislative Assembly of the Northwest Territories, 9th Session, 10th Assembly, Hansard Official Report Day 36, June 4, 1987
2. Checklist of Curriculum Materials
3. Questions: Interview with Individual Teachers
4. Questions: Interview with Principals
5. Questions: Interview with Group of Teachers
6. Consent Form
7. Summary of Data from Interview Questions Individual Teacher Interviews
8. Summary of Data from Interview Questions Principal Interviews
9. Summary of Data from Interview Questions Group Interviews
10. Summary of Checklist of Curriculum Materials
11. Map of the Northwest Territories
12. Letters to Superintendents and Principals
13. Time Allocation - School Programs Memo March 7, 1988

List of Tables

Chapter 1

Introduction

The Problem

In the field of education, implementation has appeared increasingly over the years, to offer an interesting and promising area for study. Implementation has been defined in several ways, but when applying this term to curricula, educators have generally defined it as the extent to which what was actually taught conforms to what was planned or intended.

Until recently, the major focus in education has been curriculum development rather than implementation, since it was assumed that once curricula were developed they would be implemented as planned. However, recent research has shown that this is not what occurs, and that curriculum if implemented at all, rarely conforms to original plans [Fullan, 1985; Wong, 1985]. This revelation has led to increased attention to the study of implementation.

Several models, theories, processes and approaches in relation to implementation have been discussed in the literature, but since implementation is a relatively new field of study, no one theory or model has been found to predominate. While many of the models have involved more than one stage of implementation, there is apparently little agreement on what the stages are and at what rate they occur. Most authors have agreed, however, that implementation is a complex, dynamic process, and not a single event.

Increasingly, provision for the investigation of implementation is being incorporated in new curriculum development, because implementation has been recognized as a critical element in the evaluation of any curriculum or program.

The Government of the Northwest Territories [G.N.W.T.] has recently developed, formally adopted and circulated for implementation, a new school health curriculum entitled Northwest Territories School Health Curriculum [N.W.T. School Health Curriculum]. A preliminary study of the implementation status of this curriculum was therefore, perceived as a useful undertaking. The G.N.W.T. Department of Education

recognized the need for, and as a consequence, supported this preliminary study prior to their carrying out a more comprehensive evaluation of the curriculum.

Background Information

In 1983, the G.N.W.T. Departments of Education, Social Services, and Health collaborated in preparing a comprehensive school health curriculum for kindergarten [K] to grade nine. This was developed only after an extensive needs assessment had been conducted. The results of this needs assessment were described in the Northwest Territories School Health Program - Report on the Needs Assessment [Imrie and McLain, 1984].

The N.W.T. School Health Curriculum materials were developed jointly by the Departments of Health, Education and Social Services. The curriculum materials were all field tested and revised prior to their distribution for implementation. Since September 1987, six of the seven curriculum units, namely, Mental and Emotional Well Being, Growth and

Development, Family Life, Alcohol and Other Drugs, Nutrition, and Dental Health have been introduced, one at a time, to the Northwest Territories' [N.W.T.] schools. The unit on Dental Health was only released to schools in May 1990. At the time of collecting the data for this investigation (May and June, 1990), materials for the Safety and First Aid Unit had been developed and were being printed for distribution in the 1990/91 school year.

As part of the introduction to the new curriculum, selected teachers and health professionals received introductory inservice training from the Departments of Health, Education, and Social Services. These trained people were in turn, expected to train others in their respective Regions. Since this initial training, the responsibility for implementation of the N.W.T. School Health Curriculum was devolved to the Regions and/or School Boards.

The Department of Education has declared health education, including the topic of family life, mandatory. All schools are obliged to teach the concepts that are embodied in the N.W.T. School Health Curriculum but they do not necessarily have to use the

materials contained in the curriculum.

Since family life is an element of this established curriculum, all schools must teach the related concepts but parents may arrange for the exclusion of their children from some of the family life classes. The concepts contained in all units of the curriculum, however, must be taught in all schools. This is an "opt out" system and unlike the usual "consent to opt in" system which is applied in most parts of Canada. This policy was presented to the Legislative Assembly of the Northwest Territories and received its endorsement [Appendix 1].

School Health Curriculum Materials

In this study, curriculum was defined as the materials contained in the N.W.T. School Health Curriculum binders. The materials that were prepared for the N.W.T. School Health Curriculum included:

Curriculum binders

These binders contained information on: introduction to the materials with time line allocation, lesson format, approaches and techniques

for teaching health, a language development approach, assessment activities, and approaches to evaluation; individual lesson plans, by grade and topic, with objectives, and suggested student activities; and, detailed background information on each topic for the teacher.

Pamphlets

The pamphlets describing the curriculum were:
School Health Program Information for Administrators and Teachers;
Alcohol and Other Drugs, a Preventive Program Information for Administrators and Teachers;
The Family Life Unit Information for Administrators and Teachers;
School Health Program Information for Parents;
Family Life Education Information for Parents; and,
Alcohol and Other Drugs Information for Parents.

Evaluation of the Curriculum

The comprehensive needs assessment conducted in 1983/84, reported that a sample of 3,000 persons out of the total N.W.T. population of 54,000, responded to

questionnaires [Imrie and McLean, 1984]. The questionnaires were limited to pre-adolescent students, adolescent students, parents, local educational authorities, teachers and administrators.

A quantitative health survey of the Department of Health statistics, identified illness problems and treatment services provided through the Nursing Station Health Management System. This information was included in the needs assessment [Harvey, Fred, McCutcheon, and Fry, 1984].

Additionally, in 1987, prior to the implementation of the School Alcohol and Other Drugs Unit, a survey was conducted to determine the knowledge, attitudes and behaviours of grades five, eight, and ten students [Harvey and White, 1987]. Survey data were obtained from 1,179 students who represented 51 of the 73 schools in the Northwest Territories.

Each curriculum unit was subjected to field testing in Northwest Territorial schools. Revisions were made to the units before they were printed and then the curriculum was distributed to the schools for implementation.

No evaluation or implementation study of this curriculum has been carried out prior to this study.

Research Questions

The major research question of this investigation addressed the concern of whether or not the N.W.T. School Health Curriculum was being implemented. Subsidiary questions examined the extent of implementation as well as barriers and/or facilitations to implementation.

Major question

Has the N.W.T. School Health Curriculum been implemented and taught to students in kindergarten to grade nine?

Sub-questions

1. How many teachers are aware of the N.W.T. School Health Curriculum?
2. How many teachers are currently teaching health?

3. How many teachers have access to the N.W.T. School Health Curriculum?
4. How many teachers use parts, or all of the N.W.T. School Health Curriculum?
5. What are the reasons for using parts and not the entire N.W.T. School Health Curriculum?
6. What are the barriers to implementation?
7. What special arrangements are being made, or have been made for teachers and principals to ensure implementation of the curriculum?
8. What strategies would enhance implementation?

Rationale for Study

As the literature suggests, even though curricula have been adopted and circulated, implementation does not in fact often occur [Aslin and DeArman, 1976; Wong, 1985]. At best, implementation may be partial, but rarely is it complete [Fullan, 1982; Fullan and Park, 1987; Glatthorn, 1987; Kirst and Meister, 1985;

Wong, 1985]. This may be due to the barriers, the concept of which has recently gained recognition in curriculum implementation. As well, in addition to the barriers generally inherent in curriculum implementation, other difficulties in teaching health in schools have been identified [Basch, 1984; Fors and Doster, 1985; Lohrann and Zimmerli, 1987; Parcel, 1989; Pine, 1989; Owen, 1985].

It is important when evaluating the implementation of any curriculum, to be aware of, and understand the barriers to implementation. Likewise, it is valuable to recognize the strategies that have been beneficial and/or would be valuable to enhance the implementation process.

Anticipated Output

The N.W.T. School Health Curriculum was introduced one unit at a time, starting in 1987, and by the spring of 1990 when this study was conducted, 5 units were available to the schools. In May 1990, the Dental Unit was distributed but was not available in all schools. The final unit, Safety and First Aid,

was scheduled for distribution and implementation during the 1990-91 school year. Since the introduction of the N.W.T. School Health Curriculum had been a protracted endeavour, it was anticipated that each of the 7 units would be at a different stage of implementation.

Implementation takes many years [Basch, 1984; Fullan and Park, 1981; Loucks and Hergert, 1985]. Even if all of the positive strategies were applied, including unlimited resources, at least 5 years would be required to ensure adequate time for full implementation [Basch, 1984; Fullan and Park, 1981; Loucks and Pratt, 1979]. It was anticipated that questions asked of teachers and/or principals on the status of implementation would produce different responses, because implementation has been phased in, at varying rates, in different locations and by different teachers.

Strategies that had proven beneficial should be identifiable by the teachers. As well, barriers to implementation should be revealed if the teachers and/or principals were guaranteed anonymity. These barriers and positive strategies would then provide

worthwhile hypotheses for future research.

This preliminary study was not intended to produce definitive answers, but to suggest areas for further investigation in a comprehensive evaluation.

Assumptions

While it was recognized that interviews could produce some biased responses, it was assumed that most responses would be reasonably factual and would reflect the teachers' and /or principals' honest opinions.

Behavioral self reports, such as the numbers of hours spent teaching health or the area of curriculum covered, could also be incomplete and/or biased. The assumption was made that self reported responses would be the best available information.

Generalizations should not be made about the status of implementation of the N.W.T. School Health Curriculum across the N.W.T., based on a study of this scale. Interpretations of the results of this study are to be confined to the three communities involved in the data collection, but the responses and insights

gained, could point to questions that could be raised in future investigations.

Organization of the Study

The material of this thesis is presented in the following order: Introduction; Review of the Literature; Procedures; Analysis and Interpretation of Data; and Conclusions with Recommendations. Data analysis and interpretation of data are based on Fullan's model of implementation [Fullan, 1982]. Several appendices are included for clarification.

Chapter 2

Review of the Literature

Introduction

This chapter will focus on literature related to curriculum implementation, definitions of implementation, models and approaches to implementation, the role and impact of participants including teachers, principals, students, administrators and others on implementation, and on the research relating to the implementation of health education curricula. This review also examines Fullan's framework to implementation [Fullan, 1982].

History of Implementation

Implementation gained recognition as an important aspect of learning only in the 1970's. Prior to that time, it was a non-event [Charters and Jones, 1973; Fullan and Park, 1981]. Wong [1985] suggested that in the past, it was taken for granted that a curriculum

would be implemented more or less as planned and the actual application of the curriculum would ultimately be as was originally planned. It was usual that for a new curriculum, much time and energy were devoted to the curriculum development and student pretesting phases, but not much concern was given to implementation. In the late 1970's, questions about implementation began to be addressed, for as Kolbe and Iverson [1981] stated, "no matter how effective, efficient or influential the program, it will have no impact unless it is implemented" [p.58].

Fullan and Pomfret [1977] described the black box theory as it applied to the introduction of a new curriculum. They detailed three stages: stage 1 was categorized as being devoted to developing and pretesting students; stage 2 to distributing the curriculum for implementation; and, after a period of time, stage 3 to post-testing students to see if their knowledge, attitudes or behaviours had changed. The period between stages 2 and 3 was referred to as the black box. Fullan and Pomfret [1977] maintained that one was unable to determine the effect of the curriculum on students unless one knew that the

curriculum had been implemented, or taught. Also, without collecting implementation data it would be impossible to determine the causes for the outcomes. The investigation by Fullan and Pomfret (1977) of the black box as it applied to implementation, provided new insights into how students learn.

In 1976, the National Institute of Education in the United States investigated the adoption and abandonment of 33 innovative practices that had been formally adopted in various high schools [Aslin and DeArman, 1976]. The study reported that implementation was completed in 15% of the schools, partially in 15%, not implemented in 68%, and tried but abandoned in 2% of the schools. This study demonstrated that it should not be assumed that formally adopted curricula are necessarily implemented even if the curricula materials were distributed [Wong, 1985].

In reviewing the literature, cases were cited where implementation of curricula was investigated but it could not be established that these curricula had, in fact, been implemented. Several authors corroborated the notion that although teachers may

refer to the curriculum by name, report that they were teaching a particular curriculum, and/or report that when curriculum materials were accessible, teachers actually used them, there was no evidence of implementation [Fullan and Pomfret, 1977; Goodlad and Klein, 1970; Hardy, 1983; Hill, 1986; Leithwood and Montgomery, 1987].

Fullan and Park [1981] wrote "the cumulative frustration arising from failed attempts over the past 15 years, combined with increasing limited resources, force us to consider what can be done to implement needed programs more effectively and to reduce the number of wasted efforts" [p.1]. From the late 1970's to the present, the black box of curriculum implementation had begun to be opened [Leary, 1985].

More questions than clear answers appeared. Many administrators, principals and teachers did not, and do not now, see the importance of implementation, partly because the answers are not clear and simple. Leithwood [1986] warned that implementation was often taken for granted.

Much effort and resources have been devoted during the past years to developing new curricula that

were never implemented. Since fewer resources may be available to schools in the future, it would be desirable to ensure that needed programs are developed and implemented more effectively [Fullan and Park, 1981]. However, this is a contradiction, given the current and anticipated budgetary restraints over the short and medium term. Cost, therefore, may be a major inhibitory factor.

Implementation Defined

Fullan and Park [1981] defined implementation as "a process of learning and resocializing over a period of time involving people and relations among people in order to alter practise" [p.23].

Leithwood [1982] defined implementation as a process which "involves reducing differences between existing practises and practises suggested by the innovators" [p.253].

Wong [1985] described curriculum implementation as "a complex and multidimensional process of altering existing educational priorities in order to achieve more effective learning outcomes for students" [p.1].

Most authors agree that implementation is a complex process and not an event. In fact, Fullan and Park [1981] stated "it turns out that implementation is much more complex and difficult to plan than was ever contemplated" [p.1]. Despite any amount of planning, organizational conflict and disequilibrium were still major factors during the implementation stage [Patton, 1986].

When looking at curriculum implementation, Orpwood [1985] suggested that four types of curricula need to be considered: intended curricula [departmental guidelines], planned curricula [in schools], taught curricula [in classroom], and learned curricula [students' achievement]. In an ideal world, all of these would be the same [Orpwood, 1985].

Implementation may be seen as an outcome, that is, comparing what was taught to what was intended or planned. In general terms, therefore, implementation could be defined as a process that puts in place something that was designed.

Models and Approaches

Change

Since implementation as a field of study is relatively new and not well developed, it was found that change theories had many implications for curriculum implementation. The theories and models of change included: reasoned action, grounded theory, social learning theory, planned change, problem-behaviour theory, PRECEDE model, and social-psychological approaches. Parcel [1984] maintained that because there are so many theories and models of change, no one predominated.

All these change models and theories have implications for curriculum implementation since implementation involves change, but change models and theories were not examined in this literature review. Instead, this review was confined to the models, processes, and approaches that specifically applied to implementation.

Implementation

1. Charters and Jones [1973] identified four stages of implementation, namely, institutional commitment, structural alternatives, staff role performance, and student learning activities.
2. Hall and Loucks [1977] proposed a developmental process for implementation which included non-use, orientation, preparation, mechanical use, routine refinement, integration, and reward. This developmental process involved changes in feelings, skills, and concerns which individuals experienced over time.
3. Fullan [1982] and Fullan and Park [1981] identified planning, implementation, and revising, as three phases in the change process. They listed 12 factors that affected implementation but the list was later expanded to 15. These 15 factors were need and relevance, clarity, complexity, quality and practicality of program, district's history of attempts at

innovative change, adoption process, district's administrative support, staff development, and participation, time-line and information systems, characteristics of the board and community, the principal, teacher-teacher relationships, teacher characteristics and orientation, role of the government and external assistance. Fullan [1982] and Fullan and Park [1981] maintained that the more of these factors that supported implementation, the greater the change that would occur.

4. Leithwood [1982, 1986] and Leithwood and Montgomery [1982, 1987] envisaged three approaches to the process of implementation. The first approach was fidelity. This involved prespecification of the innovation and rejection of any practices that divert in any way from what was specified. Adaptation the second approach, involved the permitting of variety across situations. Muddling through, the most common approach to

implementation, was the third approach.

Other authors, including Fullan and Pomfret [1977], used the term fidelity to imply correspondence of the innovation to the intended or planned use, but Leithwood [1986] described alternative orientations in the process of implementation that included fidelity. Leithwood [1986] also suggested that any implementation change that did occur, could be short lived.

5. Tuckman [1979] described an implementation model of differentiated inputs which included instructional effects [method of delivery], teacher effects, students effects, subject matter effects, and environmental effects.

6. Scanlon and Nay [1977] and Basch and Gold [1985] applied a relatively new concept called type III error. A type III error resulted from evaluating a program that had not been adequately implemented. Avoiding a type III error required that a program be evaluated to determine a high level of

implementation. When measures of implementation data or type III error measurements were included in the assessment of implementation, they increased the validity of the experiments.

7. Fitz-Gibbon and Morris [1987] and Herman, Morris and Fitz-Gibbon [1987] described a "how to", step by step approach to implementation which incorporated many models of evaluation. They suggested a comprehensive model which demonstrated that program policies and program practices overlapped but were not identical.

Participants Involved in Implementation

The literature generally supported the view that teachers were the most important participants in curriculum implementation. The effectiveness of a given program depended on the extent to which the curriculum was taught in the classroom [Basch, 1984]. In fact, Glatthorn [1987] stated "when the classroom door closes the teacher becomes the curriculum"

[p.128]. Hall and Loucks [1977] based their research on the assumption that the classroom teacher was the primary unit of adoption. Other authors differed only in as much as they included principals too, as the people most responsible for effective implementation [Hardy, 1983; Leithwood and Montgomery, 1982].

Shower [1984] maintained that there were five essential requirements to assist teachers to effect change: theory, demonstration, practise, feedback, and coaching. Generally, the literature supported this view, but the terms used were somewhat different, for example, preservice, inservice and ongoing support [Fullan, 1982; Loucks-Horsley and Hergert, 1985; Tricker and Davis, 1988].

Fullan [1982] and Loucks-Horsley and Hergert [1985], advocated the ongoing support as the most crucial element in implementation. In the literature, this ongoing support included person to person assistance for teachers, material support, leadership, and moral support [Loucks-Horsley and Hergart, 1985; Tricker and Davis, 1988]. Loucks-Horsley and Hergert [1985] believed that "help and support given teachers after planning and initial training is more crucial

for success than the best training money can buy" [p.ix]. Fullan [1985] concurred, and thereby subscribed to the notion that investment in ongoing assistance during the early stages of implementation, was of more benefit than front end training.

Preservice training was a term usually used to describe inservice given prior to the implementation of an innovation, but sometimes this term included basic teacher preparation and/or development. Teacher preparation was found to be a critical factor in implementation, nonimplementation, or misimplementation of a new program [Downey, 1975; Fullan and Pomfret, 1977]. According to Tanner and Tanner [1980], teachers needed help in developing a knowledge base in preservice training.

The term inservice training generally referred to the training of teachers just prior to or during the implementation of an innovation. Inservice training for teachers, however, was found to be generally ineffective and wasteful. Fullan [1982] claimed that this occurred because inservice was most often ad hoc, discontinuous, and unconnected to any plan, and therefore, generally failed to meet the needs of teachers.

In the literature it was noted that teachers also generally complained that there was never enough time for implementation [Fullan and Pomfret, 1977]. Loucks-Horsley and Hergert [1985] and Fullan and Pomfret [1977] mentioned that the lack of materials also played a part in the extent to which implementation occurred.

It was suggested that implementation incurs personal costs. Frustration, painful experience, few incentives and unrewarded efforts were often associated with trying new innovations [Fullan, 1982; Fullan and Pomfret, 1977].

Crowther [1972] reported that a teacher's age and education appeared not to be related to the effectiveness or completeness of implementation. Studies by Berman and McLaughlin [1976] however, indicated that the greater number of years a teacher had been teaching, the less likely that teacher would be effective in implementation. In light of these conflicting views, Fullan and Pomfret [1977] suggested that teacher characteristics should be included in any analysis of program implementation until such time as conclusive evidence is provided.

Leithwood and Montgomery [1982] reported that in curricula with complex objectives, teachers tended to lag in implementing some of the complex objectives compared to the simple ones. Simple objectives, such as the use of resource materials, were often found to be the first to be implemented. Fullan [1985] stated that changes in attitude, beliefs and understanding, tend to follow rather than precede change.

Change was found to be difficult to effect, hence it may be unrealistic to expect teachers to change while they were teaching full time [Hardy, 1983]. While it was shown that teachers who participated in the development of a curriculum had a higher rate of effective implementation, the literature did not specify that those teachers had full time teaching responsibilities [Fullan and Park, 1981; Rubin, 1980]. As well, Fullan [1982] reported that teachers who had participated in curriculum development, had not been shown to be effective in encouraging other teachers in implementing new curricula.

Fullan and Pomfret [1977] believed that the chances for effective implementation increased when teachers' morale was high. Fullan [1982, 1985] and

Fullan and Park [1981] found that improvement in implementation in schools was achieved when teachers discussed teaching frequently, when teachers and administration observed each other teaching and provided feedback, and teachers and administration planned, designed, and evaluated teaching materials. Peer feedback, frequent meetings, planning in schools to address obstacles, and a sense of ownership by the teachers, were all found to be positive strategies for implementation [Fullan and Park, 1982; Fullan and Pomfret, 1977; Hardy, 1983]. Fullan and Pomfret [1977] stated that "regular and frequent staff meetings were an important determinant of all of the four measures of implementation" [p.375].

Training and assisting new teachers and people in leadership roles also were found to be helpful [Fullan, 1985]. Hardy [1983] believed that "the single most powerful internal factor which takes its toll on continual change is staff and administration turnover" [p.53]. These observations emphasized the ongoing need for orientation and support of new staff members.

Hardy [1983], Leithwood and Montgomery [1982], Loucks and Pratt [1979], and McLaren [1987] pointed out that considering the principal as a major player in curriculum development was a recent phenomenon. Hardy [1983] maintained that principals in individual schools were the leaders who contributed most to curriculum implementation, but many principals acted as administrators rather than facilitators of curriculum change. Teachers tended to carry out more effective implementation when there was active support from the principal, but change seemed to be resisted when the principal was not responsive to the classroom management needs of teachers [Fullan, 1985; Fullan and Pomfret, 1977; Leithwood and Montgomery, 1982]. Hardy [1983] and Davis [1985] felt that principals as well as teachers needed preservice, inservice, and ongoing support to attain high levels of implementation.

Little information was found in the literature regarding students' participation in implementation. Fullan [1982] posed the rhetorical question, of what would happen if the student was treated as someone whose opinions mattered in the process of implementation.

The term administrator was often used in the literature to refer to senior officials in departments of education, superintendents, and/or principals. In which ever way the term was used, there was the repeated theme that administrators underestimated the time required for implementation to occur. Implementation may take up to five years [Basch, 1984; Fullan and Park, 1981; Loucks and Pratt, 1979] but administrators neglected or underestimated resources essential for implementation [Fullan and Pomfret, 1977; Tanner and Tanner, 1980].

Wong [1985] pointed to the usual situation of administration developing and handing down centralized policies. These policies did not necessarily result in implementation because they failed to address the complicated area of people issues. Fullan and Park [1981], as well, ascribed the frequent failure of implementation to this cause, that is, paper changes, rather than people changes.

Fullan [1985] stated that "in their desire to bring about needed changes, policy makers frequently neglect or underestimate essential resources and feasibility relative to implementation...fail to

consider what would be realistically needed for the policy to work...[overlooked the fact that]...factors working at cross purposes must be reconciled... [have]...high expectations and limited resources" [p.397]. Often financial and human resources were found for curricula development and for testing their impact on students, but were not available for implementation [Fullan and Pomfret, 1977; Kolbe and Iverson, 1981; Tanner and Tanner, 1980; Tricker and Davis, 1988].

Fullan [1985] and Fullan and Pomfret [1977] also recognized the need for ongoing financial support through a regular budget in order to ensure that materials and resources would be available. Other literature reported the necessity for inservice and ongoing support, but neglected to mention the financial requirements except in a vague or general way [Basch, 1984; Fitz-Gibbon and Morris, 1987; Glatthorn, 1987; Kolbe and Iverson, 1981; Loucks and Pratt, 1979].

Fullan and Park [1981] maintained that planning and incorporating an information system for use by teachers and administrators, could be beneficial in

addressing administration problems associated with implementation.

Orpwood [1985] pointed out that for many years, educators preferred to believe that curricular issues were determined on a scientific basis. In fact, the literature suggests that the bulk of decisions on educational matters were not made in this manner but instead, were made in a political, interpersonal environment in which evidence played a minor role [Popham, 1988].

Fullan [1982] stressed the importance for governments to articulate clearly what their policies are, and to recognize the importance of consulting with local community groups about expectations with respect to local implementation. Kirst and Meister [1985] stated that "many political scientists contend that the school is overwhelmingly reactive to major societal trends and can do little to alter society's structure and values" [p.171].

The literature made little or no mention of the key role other groups played in implementation. It was, however, recognized that educational boards and community support were important in implementation

[Fullan and Pomfret, 1977; Hall and Loucks, 1977]. Educational organizations, other than school boards, tended to have little impact on implementation [Fullan and Park, 1981].

Leithwood and Montgomery [1982] mentioned that public praise could reinforce the behaviour of teachers and encourage them to try new innovations. Other authors agreed as well, that for successful implementation, new innovations should not be opposed by parents nor the community, and that local social and cultural characteristics should be taken into consideration [Fullan, 1982, 1983; Glatthorn, 1987; Killip, 1987; Kolbe and Iverson, 1981].

Health Education Curriculum

Concerns peculiar to teaching health in schools were found in the literature. For example, research showed elementary teachers generally have little or no background in health and/or the sciences, but they were expected to teach adequately a comprehensive school health curriculum [Basch, 1984; Connell, Turner, and Mason, 1985; Lohrmann, Gold and Jubb,

1987; Pine, 1985].

Wilcox [1988] in commenting on the Holmes Report for Health Education, suggested that teachers should take an additional year of graduate level teaching preparation before certification. This training should include the sciences in order to ensure that teachers obtain a solid background in that discipline before teaching health.

It was found that because of limited background, teachers tended to require additional orientation time or pre-inservice, to establish an adequate knowledge base and to acquire the unique techniques needed for teaching health. The better prepared teachers or those teachers with extensive orientation to individual health curricula, however, implemented curricula more completely and with greater fidelity [Basch, 1984; Lohrmann, Gold and Jubb, 1987; Owen, 1985; Pine, 1985; Pruitt, 1985]. Several studies recommended 40 to 60 hours of orientation [Cook and Walberg, 1985; Connell and Turner, 1985; Fors and Doster, 1985; Owen, 1985; Pine, 1985; Tricker and Davis, 1988].

In the literature, health education was given a low priority in school curricula [Lohrmann and Zimmerli, 1987; Owen, 1985; Pine, 1985]. Teachers maintained that they lacked sufficient time to teach health because of the demands of the core subjects [Parcel, 1989].

Teachers also charged that family life caused the most concerns [Pine, 1985; Zimmerli, 1981]. Teachers' needs for inservice in family life and other areas depended on their past experience [Tricker and Davis, 1988]. It was found however, that if program coordinators were employed, they could fulfil an important role by providing inservice and ongoing support to teachers [Owen, 1985; Tricker and Davis, 1988].

Curriculum implementation, including health curricula appeared to be related to teachers' perceptions of support for their work [Fors and Doster, 1985; Lohrmann, Gold and Jubb, 1987]. As well, other authors reported that curriculum implementation increased when parents and community members were involved [Airhihenbuwa and Pineiro, 1988; Davis, 1985; Killip, 1987; Zimmerli, 1981].

The landmark and comprehensive School Health Education Evaluation [SHEE] was released in 1985 [Connell and Turner, 1985; Cook and Walberg, 1985; Fors and Doster, 1985]. SHEE was a three year study reporting on 30,000 students in grades four to seven, in 20 states of the United States of America. Four curricula were used in the study to assess the outcomes of students in health knowledge, attitudes, and behaviours, pre and post implementation of curricula. The School Health Education Evaluation reported:

* the more classroom hours spent on learning health, the more the students learned;
* different types of learning required different amounts of time. For example, acquiring knowledge in one area took 20 classroom hours, while to change an attitude took 40 to 50 hours;
* more than 50 hours of classroom teaching resulted in diminishing returns if more hours were applied to complete the same material;

* teachers who completed full training programs demonstrated greater fidelity to the curriculum;
* planned and ongoing inservice programs for teachers and principals produced a positive influence on implementation;
* appropriate and easily available materials increased implementation;
* more selective teaching occurred in the teacher's second year of teaching the curriculum, and the teaching was more effective and required fewer hours;
* activities involving resource people were the least likely to be implemented; and,
* continuity across the grades in dealing with building a foundation of basic health knowledge, produced better results than dealing with specific health issues.

Fullan Framework

Fullan and Park [1981] suggested that there were three stages or phases to the change process, namely,

planning, implementation [altering practice], and revision. They listed 12 factors that affected implementation, but Fullan [1982] later expanded the number of factors to 15. These 15 factors were described under the four broad categories of attributes of change itself, characteristics at the school level, school-level factors, and the external environment.

Attributes of change itself

1. Need and relevance

   Fullan [1982] described need and relevance as important in "teachers' readiness" for implementation.

2. Clarity

   Fullan [1982] pointed out that many teachers were often unclear about the goals to be achieved, even though they were in agreement that change was warranted and they were willing to attempt change. Fullan also noted that policies and legislation relating to implementation were often ambiguous for promoting acceptance, and in the process of implementation, the

goals became fuzzy.

3. Complexity

This referred to the relative difficulty of implementation, the extent of the change and its impact on individuals. Fullan [1982] pointed out that usually, simple changes were easier to implement but they often made only small differences. Complex changes were more difficult to effect, but they had the potential to produce significant, long lasting results.

4. Quality and practicality of program

This factor referred to the product, that is, resource materials, guidelines, and the total curriculum [Fullan, 1982].

Characteristics at the school level

5. The district's history of attempts at innovative change

Fullan [1982] maintained that most attempts at change end in frustration and wasted effort, so teachers often appeared sceptical when asked to make changes. It

was, therefore, important to ascertain what prior attempts had been made to introduce change at each school examined and what had been each teacher's experience in this regard. The latter was important since there was a carry over effect from past failures to new attempts.

6. The adoption process

Fullan [1982] pointed out that bureaucratic adoption of change rarely resulted in effective implementation. As well, the practice of involving teachers and principals in planning and developing materials was only meaningful to those who had participated in the process. He realized that not all teachers could be involved in planning and developing the materials, but maintained that how decisions were made in the implementation process was more important than participation in curriculum planning and development. This implementation process referred to the leeway given to individuals

in making decisions on what works and what does not.

7. District's administrative support

The issue of support from administration, including that of the principal and superintendent as demonstrated by their actions to the teachers, was an indication of the administration's seriousness and commitment to implementation [Fullan, 1982]. For example, if ample resource materials were available, it would indicate that administration was committed to the program.

8. Staff development and participation

Fullan [1982] identified this as one of the most important factors. He suggested that the implementation of a curriculum that involved the learning of new methods and the use of new materials, resulted in new behaviours. The degree of implementation was not proportional to the amount of staff training but instead, orientation prior to implementation, followed by inservice and

ongoing support during implementation, appeared to be the key elements in staff development and amenability to participation. Implementation then, was seen by Fullan [1982], to be a process of re-socialization which was enhanced by sustained interpersonal interactions.

9. Time-line and information systems [evaluation]

Fullan [1982], Fullan and Park [1981] and others pointed out that often, unrealistic time frames were expected or imposed for implementation [Basch, 1984; Loucks and Pratt, 1979; Wong, 1985]. Fullan [1982] stressed that a time-line must be influenced by the implementation process as it relates to consideration given to the 15 factors. The information to be collected and how to collect it in order to identify implementation problems and resolve them was another area to be examined. Fullan [1982] suggested that the best place to monitor implementation problems was in the

school.

10. Board and community characteristics

Fullan [1982] noted that several authors suggested the positive influence of community support on the implementation process, also that often, individual parents exercised greater influence over change than did community groups.

School-level factors

11. The role of the principal

Fullan [1982] suggested that while principals' attitudes did affect the implementation process, principals did not usually take an active part in the process. Fullan considered this unfortunate because the principal's input and example would have facilitated implementation.

12. Teacher-teacher relationships

Since implementation involved re-socialization, Fullan [1982] maintained that the acquisition of new skills depended on how well and the extent to which

teachers interacted with each other. Trust, support and communication appeared to be important.

13. Teacher characteristics and orientation
It appeared that years of teaching experience and university preparation, even though they were routinely cited in research on change, did not shed light on why some teachers implemented change and others did not. Fullan [1982] suggested that instead, the sense of efficacy of teachers, individually or collectively, was responsible. Efficacy was described by Fullan [1982] as the teacher's sense of being able to make a difference and actually doing so.

<u>The external environment</u>

14. Government agencies
Legislation, policies and new program initiatives are normally controlled by forces beyond the scope of the school board. Fullan [1982] maintained that most

government agencies underestimated the difficulties inherent in implementation.

15. External assistance
Since governments are usually the sources of funding, teachers and principals therefore viewed support for implementation of a program by the amount of resources government allocated to it [Fullan, 1982]. This support may be in the form of availability of materials, orientation workshops, and/or ongoing financial and human resources.

Summary

From the literature it is apparent that while many definitions of implementation were offered, most authors did agree that implementation was a complex process and not an event. In addition, the literature describes certain factors inherent in teaching health which complicate the study of implementation of school health. Many models and approaches have been proposed for addressing implementation because the implementation process is so complex and encompasses interrelated factors. As a result of this complexity,

many researchers and educators still remain reluctant to tackle the issue of implementation.

Chapter 3

Procedures

Introduction

In this chapter, the design and methodology employed in the study are outlined under the headings of research design, research rationale, instruments, data collection methods, and sample population.

Research Design

This study describes the implementation status of the Northwest Territories School Health Curriculum in six schools in three northern communities, as of June 1990. According to Charles [1988], "the purpose of both historical and descriptive research is to describe- and afterward to interpret- present and past situations, conditions, events, and trends. This satisfies our innate need to know and, in addition, provides a basis for speculating on why things were as they were, or are as they are" [p.81].

A descriptive approach was selected for this investigation. Dyer [1979] states that "a good descriptive design clearly specifies who and what are to be measured" [p.148]. Dyer [1979] went on to caution that "although the purpose of a descriptive study is not to explain why the differences or similarities occur in subgroups, the researcher may legitimately speculate on such reasons in the discussion section of the report" [p.150].

With Dyer's comments in mind, this study attempts to describe the implementation status of the N.W.T. School Health Curriculum in six N.W.T schools by checking in each school the availability of the N.W.T. School Health Curriculum and by interviewing persons directly involved in teaching school health, [i.e. teachers and principals].

Research Rationale

Fullan and Park [1981] suggest that there are three stages or phases in the change process, namely, planning, implementation, and revision. This study deals only with the implementation phase. Fullan and

Park [1981] listed 12 factors that affected implementation, but Fullan [1982] later expanded the number to 15. Fullan's 15 factors were utilized as the framework for the collection of data for this study. In applying Fullan's framework, the data collection focused on those factors which the literature indicated as being pertinent to implementation [Fullan, 1982].

Instruments

Many methods could have been employed to obtain data for this type of study, such as observing in the classroom, checking the availability of the curriculum materials in each school, reviewing students' health notebooks, reviewing students' records for grades obtained in health courses, and questioning teachers, principals, resource consultants, administrative personnel, students, and/or parents by questionnaires and/or interviews.

The literature recommended that more than one method of data collection be employed [Fullan and Pomfret, 1977; Patton, 1986]. Since this was a

preliminary study, it was deemed sufficient to limit data collection to checking the accessibility of the N.W.T. School Health Curriculum in schools and to interviewing teachers and principals. Four data collection procedures were used in this study, they were a checklist of curriculum materials [Appendix 2] and three different sets of interviews [Appendices 3, 4, 5].

Checklist of materials

A detailed checklist was developed which included the page numbers for each unit and every grade in the N.W.T. School Health Curriculum. The checklist was printed on one page with boxes to allow for easy recording of findings [Appendix 2]. This checklist was reviewed by the Health Educational Consultant employed in the G.N.W.T. Department of Education and was confirmed to be complete.

Interview questions

Three sets of interview questions relating to the sub-questions listed in Chapter 1 Introduction

(page 9), were developed based on Fullan's [1982] 15 factors. Table 1 summarizes the 15 factors of implementation as described by Fullan [1985] and the interview questions that were used to address each factor [Appendices 3,4,5].

Table 1. Implementation Factors and Related Questions

No.	Factors	Questions
1.	Need and Relevance	no specific questions - general information
2.	Clarity	- T14, P9
3.	Complexity	- T23, P1, P16, G2, G7
4.	Quality and Practicality of Program	- T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T20, T21, T22, T24, T25, P1, P4, P5, P6, P7, P8, P17, G2, G9
5.	District's History of Attempts at Innovative Change	- T19, P14
6.	Adoption Process	- T18, P13, P30, G1, G9
7.	District Administration Support	- T5, T11, T12, T13, T18, T27, T28, P5, P6, P7, P8, P13, P19, P20,

G = Group Interview Questions
P - Principal Interview Questions
T = Teacher Interview Questions

Table 1. Implementation Factors and Related Questions (continued)

No.	Factors	Questions
8.	Staff Development and Participation	- T15, T16, T17, T18 T29,P10, P11, P12, P13, P21
9.	Time-line and Information systems (evaluation	- T10, T18, T20, T21, T22, P13, P15, G2, G11
10.	Board and Community Characteristics	- P22, P23, G2, G4
11.	Role of Principal	- T18, T26, T28, P3, P13, P18, P20, P31, P32, P33, P34, P35, G5, G6
12.	Teacher-Teacher Relationships	- T17, T18, T29, T30, P21
13.	Teacher Characteristics and Orientation	- T1, T2, T3, T15, T16, T17, T29, T31, T32, T33, T34, T35, G1, G8, P2, P24
14.	Government Agencies	T27, P19, P29, G11
15.	External Assistance	T5, T13, T15, T16, T17, T30, P5, P8, P10, P11, P12, P25, P26, P27, P28, P30, G1, G5, G6, G10

G = Group Interview Questions
P - Principal Interview Questions
T = Teacher Interview Questions

The interviews were conducted with individual teachers [Appendix 3], individual principals [Appendix 4], and groups that consisted of teachers, principals,

and teacher assistants [Appendix 5]. The interviews were administered by the researcher and an attempt was made to clarify the questions if the answers indicated confusion. The questions were designed to facilitate open dialogue and not to limit responses.

The three sets of interview questions were field tested by the researcher on four volunteers that included principals and teachers in N.W.T. schools. The data obtained from the field testing were not included in this study. The interview questions were refined following the field testing.

The interview questions were compiled and laid out in a manner to facilitate recording of the responses [Appendices 3,4,5]. Ample space was left for "other comments" to ensure that teachers' and principals' comments were noted.

Data Collection Methods

Constraints that limit the methods and amount of data collected are travel, financial resources, and time available to the researcher. Data collection was therefore, limited to information obtained in checking

the curriculum materials available in each school and from interviewing teachers and principals.

Checklist of curriculum materials

Since the N.W.T. School Health Curriculum had been designed and distributed in sections by the N.W.T. Education Department over a three year period, it was anticipated that a complete N.W.T. School Health Curriculum might not be available in each school. It was seen, therefore, to be appropriate to check for its availability in each school.

In the interviews, teachers and principals were asked if a complete curriculum was available in their school, and to suggest where it could be found. Others, including the librarian and/or secretary, were asked where a complete curriculum could be found. If no material or incomplete curriculum was found on checking, then the principal and a number of teachers again were asked to suggest areas where a more complete curriculum could be found.

A detailed record of the availability of the curriculum in total or in part was recorded by the researcher for each school [Appendix 2]. The researcher looked for and recorded the availability of

all of the sections from kindergarten to grade 9 of the N.W.T. School Health Curriculum or a master copy of the health curriculum that could be used for reference. This did not include checking every teachers' own copy of the curriculum that would, if all were gathered together, possibly make a complete curriculum. In addition, all of the teachers interviewed were asked if they had a copy of part or all of the curriculum [Appendix 3].

Interviews

Leithwood [1987] recommended the use of interviews rather than classroom observations. Loucks and Hergert [1985] maintained that it was important to find out what people were doing and how they felt.

The interview was the chosen method for this study because it allowed for flexibility, provided a high response rate, increased the opportunity for obtaining more thorough answers, was more revealing of thoughts and feelings, dealt more easily with complex issues, allowed for rapport between the interviewer and interviewee, and provided an opportunity for feedback between the interviewer and interviewee.

It was recognized that while the interview method was chosen for this research, interviewing has the disadvantage of being time consuming, generally costly, inconvenient, and subject to bias. These disadvantages were considered.

Time was not a significant factor, for all of the interviews were concluded within a two week period. The number of interviews was limited to those that could be carried out in a two week period.

Cost was a significant constraint. Since travel cost in the Northwest Territories is prohibitive, travel was limited to six schools in three communities.

Inconvenience as a disadvantage was minimized by limiting interviews to one or two short sessions conducted during school time.

Bias, a tendency to make errors in a certain direction, could be attributed to the interviewer, the interviewee, and/or the actual questions [McLaren, 1987]. To assist in minimizing bias, many strategies were used. Initially, the interview questions were prepared by the researcher and reviewed by several teachers, university students and people outside the

educational field. The three interviews were then field tested and the questions revised. Prior to conducting the teacher and principal interviews, participant confidentiality was assured both in writing [Appendix 6] and verbally. As well, interviewees were assured that the interviewer was not a Government of the Northwest Territories investigator or employee.

The interviews were recorded by the researcher in point form and any queries the interviewer had, were clarified during the interview. To guard against interpretation bias, the interviewer read back to the interviewees the points that were recorded.

The interviews consisted of focused open-ended questions. While the interview questions served as a guide for the interviewer, the interviews were not restricted to those questions. The interviewer also repeated questions, clarified questions, and requested additional information.

1. Teacher interviews

   The teacher interviews were conducted by the researcher, one-on-one, in a quiet, private area. The majority of teachers

knew well ahead of time that they would be interviewed. The consent form was given to each teacher with an explanation of the purpose of the interview and what was required [Appendix 6]. Confidentiality was assured by the researcher. The teacher interview consisted of 36 questions [Appendices 3, 7].

2. Principal interviews

The principal interviews were conducted by the researcher much like the teacher interviews, one-on-one, in a private room, consent form signed [Appendix 6], and confidentiality assured. The principals' interview consisted of 36 questions [Appendices 4, 8].

A minor problem was encountered with catergorizing vice-principals, for they often taught as well as acted as principals. The research data includes responses from one vice-principal who took the principal interview [included with principals' data, Appendix 8], and those of

two vice-principals who took the teacher interview [included in teachers' data, Appendix 7]. This was an arbitrary decision made by the researcher, for it was felt that the duties of two vice-principals more closely resembled those of the teachers, while one vice-principal's major duties more closely resembled the principal's. As well, the questions asked in the teachers' and principals' interviews were very similar, with only a few omissions or modifications to accommodate principals rather than teachers [Appendices 3, 4]. Accordingly, in the summary of research data, one vice-principal was referred to as a principal [Appendix 8], and two vice-principals as teachers [Appendix 7].

There was only one educational consultant employed in the six schools that were studied. The remarks obtained from this individual were invaluable. The consultant was given the same interview as

the principals. The consultant's responses were included with the principals' data since teaching was not a responsibility of the consultant [Appendix 8]. The data and their analysis clearly indicated when the educational consultant was involved, for example "7 principals and the consultant" [Chapter 4 Analysis and Interpretation of Data].

3. Group interviews

The researcher felt that obtaining information from the other teachers in the schools would contribute to the quality of the data collected. This would minimize any real or apparent restrictions or bias induced by the small sample size and sampling process. The questions asked in the group interviews were similar to those of the teachers' and principals' interviews, but were limited in number to 11 questions [Appendices 5, 9].

Group interviews were held in all but one school. In the excluded school, only

three teachers were directly involved in the teaching of health so the principal and two of the three teachers who taught health were interviewed. The three who were interviewed were asked the additional 11 group interview questions, and these data were included in the group interview data [Appendix 9].

The group interviews were open to anyone in the schools who was in any way involved in the teaching of health. The invitation to participate in group interviews was different for each school, but in general it included announcements in staff meetings, memos, public announcements in the school, notice on teachers' staff room bulletin board, and personal discussions. Some schools had good participation in the group interviews, others were rather limited.

Even though teacher assistants were employed in several schools, only one teacher assistant participated in the group

interview. In two schools, principals participated in the group interview as well as in individual principal interviews.

During group interviews, participants were seated in a circle. Again, like the individual teacher and principal interviews, consent forms were given to each person [Appendix 6], and the purpose of the interview and what was required of the individual was explained. The researcher reinforced a need for openness and constructive responses.

Respondents

The Northwest Territories has a diverse population of 52,000, which is composed of Inuit [Eskimos], Dene [Indian], Metis [part Indian], and Non-native. The population is scattered over an area of 1.3 million square miles, in 60 communities. It was therefore deemed to be unrealistic to choose a randomized sample of the teacher population. Since this was a preliminary study, three typical

communities, one Inuit, one Dene/Metis, and one Non-native were chosen for the investigation.

Schools in the communities of Cambridge Bay [Inuit], Fort Rae [Dene/Metis], and Yellowknife [Non-native] were approached [Appendix 11], and they agreed to a participated in the study [Appendix 12].

Yellowknife

While Yellowknife has both a Catholic and Public School Board, the Public Schools were chosen for this study because the N.W.T. School Health Curriculum had been distributed to the Yellowknife Public Schools and as well to all of the N.W.T. communities outside of Yellowknife. The Catholic Schools in Yellowknife on the other hand, followed a different curriculum entitled The Catholic Family Life Health Education Program.

Within the Yellowknife Public School Board's jurisdiction, there were three elementary, and one junior high schools with approximately 106 teachers. Since the N.W.T. School Health Curriculum was designed for kindergarten to grade 9 students, the three elementary schools and the junior high, were included

in the study.

Elementary teachers in Yellowknife were generally responsible for teaching the health curriculum to their homeroom classes. Eighteen classroom teachers from the three Yellowknife public elementary schools who teach health education were interviewed, as well as the three Yellowknife elementary principals.

The junior high school teachers were specialists three of whom taught health and other subjects. The junior high school principal plus two of the three specialty health teachers were individually interviewed.

In Yellowknife, a total of 20 teachers and 4 principals were individually interviewed and subjected to the 36 questions [Appendices 7, 8].

Twenty-six teachers and principals from the three Yellowknife Public School Board elementary schools participated in group interviews. The junior high school principal and two of the three teachers who taught health in that school were interviewed individually [Appendices 7, 8], plus they were subjected individually to the 11 group interview questions [Appendix 9]. Therefore, the total number

of Yellowknife teachers and principals answering the group interview questions was 29.

Cambridge Bay

Cambridge Bay school had a teacher population of 18, teaching kindergarten to grade 9. A specialist teacher taught classes in health in grades 6 to 9, while homeroom teachers were responsible for the health curriculum in kindergarten to grade 5.

For this study, the specialist health teacher was interviewed as well as seven teachers, the vice-principal and the principal, for a total of ten.

All of the other teachers had the opportunity to participate in the group interviews. A total of 11 people participated in the group interview [Appendix 9]. A teacher assistant from this school also was included in the group interview.

Fort Rae

The community of Fort Rae had a teacher population of 23 who taught kindergarten to grade 9. Two teachers shared the health classes in the upper grades. The principal, six elementary teachers, the two upper grade teachers who taught health, and the

educational consultant were interviewed individually, for a total of 10. It should be noted that this was the only community interviewed that employed an educational consultant.

The group interview conducted at this school included 14 participants.

Teacher respondents

Possible options for teacher sample selection for individual interviews consisted of random selection, self selection, researcher selection, or a combination thereof. Self selection, random selection, and researcher selection were in fact all used. Selection was based on factors such as: who was free for interviews during school hours [those who had a spare], who the principal chose to be interviewed, which teachers volunteered, and who the researcher considered necessary to interview [specialist teachers in the upper grades].

All of the teachers were invited to participate in the group interviews.

Principal respondents

All of the principals of the six schools in the study agreed to be interviewed. One educational consultant was interviewed and included with the principals' data.

Three of the vice-principals were interviewed as well. In analyzing the data, one of the vice-principals was included in the principals' data because he was involved more in the coordination of the health curriculum and administrative duties. Information obtained from two of the vice-principals were combined with the teachers' data because these two vice-principals taught health in the classroom. The questions were similar for both teachers and principals [Appendices 3, 4].

All of the vice-principals and principals were invited to participate in the group interviews.

Time

The teacher, principal, group interviews, and checking for the availability of the N.W.T. School Health Curriculum [Appendices 2,3,4,5], were all conducted during the period between the last week of

May and the first week of June 1990. Conducting the research at this time of the school year ensured that the major part of the school year was completed and the principals and teachers would be able to report on what they had implemented in the health curriculum during that year.

Most of the interviews were held during the school day. The teacher and principal interviews both consisted of 36 questions and took approximately 20 minutes each for completion. The group interviews were made up of 11 questions and took between 20 to 30 minutes to conduct.

Chapter 4

Analysis and Interpretation of Data

Organization of Data

In this chapter Fullan's framework [1982] was used to analyze and interpret the data. Each of the 15 factors Fullan described and identified as important in the process of implementation, was reviewed and applied to appropriate questions used in the interviews.

A brief description of each factor and how it would apply to this study is presented. Interview questions relating to each factor are then stated and the responses are reported and analyzed. The extent to which each factor assisted or hindered implementation of the N.W.T. School Health Curriculum is summarized. A matrix of the analysis and interpretation of the data is provided at the end of the chapter.

The interview questions and checklist of curriculum material are listed in Appendices 2, 3, 4,

and 5, and also the summarized data from the interview questions together with the checklist of curriculum material are included in Appendices 7, 8, 9, and 10.

In Appendices 3 and 7, the individual teacher questions are identified by "T" followed by a number. For example, T11 refers to the individual teacher interview question #11. Likewise, the individual principal interview questions are identified by "P" in Appendices 4 and 8 and the group interview questions by "G" in Appendices 5 and 9.

Attributes of Change Itself

Need and relevance

Since the Government of the Northwest Territories conducted a school health needs assessment [Imrie and McLain, 1984], it was not deemed necessary to address this factor. It should be noted that during the interviews, several teachers and principals reiterated the value of the health curriculum and its relevance to students. Fullan [1982] maintained that the factor of need and relevance was important in the readiness of teachers for implementation.

Clarity

Fullan [1982] suggested that many teachers are often unclear about the policies, legislation, and goals of a curriculum. This in turn was seen to impact the process of implementation. Since the N.W.T. Department of Education issued specific instructions on the amount of time to be devoted to health each week, that is 60 hours per year or 90 minutes per week [Appendix 13], two questions T14 and P9, were used to address this factor.

1. The teachers were asked, "How many hours per week are you involved in teaching health?" [T14].

This question was clarified during the interviews, in order to focus on the number of hours of instruction a class received and not the hours the teachers taught health, since some teachers taught more than one class.

Of the 36 teachers interviewed, 9 reported that they taught less than 30 minutes per week, 6 taught 60 minutes, 5 taught 90 minutes, and 9 more than 90 minutes. In addition, 7 teachers could not specify the number of hours they taught health, but instead

reported in general terms such as: "86 minutes every six day cycle", "90 minutes per theme", and "10 hours per term". These 7 teachers would fall in the category of providing less than 90 minutes per week of health instruction.

The responses to this question indicated that the Department of Education's directive for 90 minutes per week of health teaching was followed by 14 teachers [39%], and that 22 teachers [61%] taught health less often.

2. Principals were asked, "Is it your perception that health is being taught at your school most weeks to all students?" [P9].

Of the 7 principals and the 1 consultant interviewed, 4 were of the impression that students at their schools were receiving health classes every week, and 3 admitted that students received health in a theme or in an integrated approach which may or may not result in health being taught every week. One interviewee admitted that health was not being taught at all to some students, also, several principals indicated that some of the elements of the N.W.T.

School Health Curriculum were not being taught in some classrooms.

When evaluating the results of questions T14 and P9 with respect to the factor of clarity, it appeared that the majority of teachers did not follow the Department of Education's directive respecting content and time allocation for health teaching. Responses given by teachers and principals within the same school, did not necessarily correspond.

An interview question to directly address whether or not the required number of hours stipulated by the N.W.T. Department of Education for teaching health had been applied, was not included in the interviews. Posing such a direct question, the researcher felt, might have put the teachers and principals on the defensive.

It was noteworthy that only one person among those interviewed referred to the directive sent out by the N.W.T. Department of Education [Appendix 13] and to the Introduction section in the N.W.T. School Health Curriculum, page 14. Both the directive and the curriculum introduction stated that 90 minutes per week of health teaching was mandatory.

Complexity

This factor referred to the relative difficulty of implementing change, the extent of the change, and their impact on individuals. Questions used to assess this factor were: T23, P1, P16, G2, G7.

1. The teachers and principals were asked, "How complex is the curriculum?" [T23, P16].

Only 1 of the 36 teachers interviewed considered the curriculum "complex", 1 teacher felt that it was "complex because of French translation" which was required for the French immersion program, 5 stated that it was "average", 26 considered it "simple", 2 thought it was "too simple", 1 that it was "piecemeal", and 1 thought it was "too time consuming".

All of the 7 principals and the one consultant reported that the curriculum was "simple".

When the principals', consultant's, and teachers' responses were added together, 36 out of 44 [77%] thought the curriculum was simple and easy to use.

2. The principals and the groups were asked, "Has the introduction of the N.W.T. School

Health Curriculum been easy?" [P1, G2].

Among the 7 principals and the 1 consultant, 4 thought the introduction was "easy", 2 felt its introduction was "difficult", and 1 "didn't know". One interesting additional comment was "the letter from Mr. Hanley Deputy Minister of Education, made the introduction easier" [Appendix 13].

When the principals'/consultant's and group interviews were combined, 24 out of 54 respondents felt that the introduction was "easy", 3 that the introduction was "not easy", 2 thought it was "easy in the lower grades but not in the higher grades", and 24 "didn't know".

3. The groups were asked, "What areas of the curriculum are the most difficult to teach?" [G7].

In descending order of most to least mentioned, 26 respondents said that family life was the most difficult to teach, 13 indicated drug and alcohol, 6 growth and development, and 3 mental and emotional well being. Two teachers considered nutrition boring and repetitive and therefore, difficult to teach. The areas of "child abuse", "sexual abuse", and overview

of the medical system" were each mentioned once. It should be noted that although the question of what areas of the curriculum are the most difficult to teach, related comments were volunteered during individual interviews with 6 of the 7 principals and 24 of the 36 teachers.

Initially, question G7 dealing with the most difficult area to teach, was to have been considered independently since it contributed to the complexity factor, but as the interviews progressed, the question "What units of the curriculum do you not use?" [T7], was also seen to be related. The responses to these two questions, G7 and T7, were, however, markedly different.

The units the teachers reported not teaching were: alcohol and other drugs - 16, nutrition - 11, family life - 6, and growth and development - 6. While difficulty in teaching an area of a unit might not be the only cause for not teaching the unit, it might be a contributing factor that would not be readily recognized by teachers.

It was noteworthy that although teachers identified family life as the most difficult area to

teach, they reported that the alcohol and other drugs unit was the unit most often omitted when teaching health. The fact that the alcohol and other drugs unit was presented in separate books, was not included in the general health curriculum binder, and was not distributed to each teacher as the other units were, might have contributed to its omission by some teachers.

In evaluating the results of the complexity factor, the majority of persons interviewed thought the curriculum was not complex and was easy to implement. The extent of change on the teacher's teaching was not so readily apparent, for even though the teachers identified family life as the most difficult unit to teach, the alcohol and other drugs unit was the one most often not taught. What was not determined from the interview questions was how much health had been taught previous to the introduction of the N.W.T. School Health Curriculum and, therefore, how much change had actually occurred in what the teachers taught.

Quality and practicality of the program

Fullan [1982] pointed out that the product (in this case the N.W.T. School Health Curriculum), was an important consideration in implementation. The Department of Education as the proponent and manager of the N.W.T. School Health Curriculum could easily revise the curriculum if change was warranted. Several questions were included in the interviews to address this factor: T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T20, T21, T22, T24, T25; P1, P4, P5, P6, P7, P8, P15, P17, G2, G9.

1. Teachers were asked, "Do you use the N.W.T. School Health Curriculum?" [T4] and principals were asked, "Is the N.W.T. School Health Curriculum being used at your school?" [P4].

In examining the 36 teachers' responses to this question, 23 reported that they used the curriculum, 13 that they used parts of the curriculum, and no teachers admitted to using none of the curriculum.

The 7 principals and the consultant all believed that the curriculum was being used.

It can be assumed from the above responses, that the health curriculum was being used at least in part, by the teachers in all the schools examined.

2. The teachers and principals were asked, "Where can you access the N.W.T. School Health Curriculum ?" [T5, P5].

The answers to this question varied, but most principals thought that teachers each had their own complete copy. The teachers reported that they possessed or shared a copy of the material for the grade they taught, and could obtain a complete K to 9 curriculum in the resource centre/library of their respective schools. All teachers and principals were fairly confident that in their school, there was a complete K to 9 curriculum. The checklist, in fact, revealed that there was no complete K to 9 curriculum at any of the 6 schools visited [Appendix 10].

3. Teachers were asked, "What units of the curriculum do you use?" [T6] and "What units of the curriculum do you not use?" [T7]. The responses given can be seen in Table 2.

Table 2 Units Used and Not Used by the Teachers

Unit	Used	Not Used
Emotional Wellbeing	33	1
Family Life	29	6
Dental*	16	16
Nutrition	23	11
Alcohol and Drugs	19	16
Growth and Development	27	6

*This unit had not been distributed to all teachers at the time of the study, and might not have been available to all of the teachers.

It should be noted that although all of the 36 teachers responded to these questions [T6 and T7], some of the teachers omitted to mention some of the units, therefore, it was unclear whether or not they used some of the units.

If the dental unit was discounted, because it was only recently distributed and might not have been available to all of the teachers, the alcohol and other drugs unit was the unit most often not used even though it was the first unit to be distributed to all schools. The alcohol and other drug unit was released in three separate books entitled Alcohol and Other Drugs K to 3, Alcohol and Other Drugs 4 to 6, and Alcohol and Other Drugs 7 to 9 . These books were not

included in the main binders with the other health units, by grade.

Emotional wellbeing was the most used unit, followed by the family life and growth and development. It appeared that the teachers were generally aware of most of the units, but chose not to use some of them.

4. Teachers were asked, "What parts of the curriculum do you use?" [T9], and "what parts of the curriculum do you not use?" [T9].

These questions were clarified so that the 36 teachers interviewed understood that these questions were not identical to questions T6 and T7, but instead were intended to ascertain which general parts of the curriculum were found to be beneficial or useless. For example: lesson plans, teacher background information, activities, were cited by the interviewer. The parts of the curriculum the teachers identified as useful were: "teacher background information", "activity sheets", and "all parts useful".

The reasons given for not using or considering not using parts of the curriculum were: "some areas too simple", "settlement orientated" (the term settlement applies to smaller Native communities), "need to be translated into French", and "activities poor at higher levels". These responses would be worth considering if the N.W.T. Department of Education were planning to modify the curriculum.

5. Teachers were asked, "What resource people do you involve?" [T11].

Of the 36 teachers interviewed, 30 teachers mentioned health professionals, 26 teachers, community resource persons, and 2 teachers reported educational professionals.

Principals were asked, "What resource people are being used at your school?" [P6].

The responses from the 7 principals and the consultant were: 7 indicated the use of health professionals, 5 the use of community resource persons, and 4 the use of educational professionals.

From the responses of teachers and principals it appeared that outside resource personnel were being used by many of the teachers at the schools.

Additional comments made during the interviews indicated that the health professionals used most often were nurses from the nursing stations and the public health units. These nurses assisted in classes dealing with the family life unit. The most frequently used community resource persons were R.C.M.P. Officers who assisted in classes on the alcohol and other drugs unit. The other local community resource persons named were mothers and babies, who were invited into the classroom when the topic of family life was discussed in grades K to 3.

Few educational resource people appeared to be utilized. The lack of the availability of educational consultants to assist teachers was reinforced at other times during the interviews.

6. The teachers were asked, "What additional resource materials do you use?" [T12] and the principals were asked, "What additional resource materials are being used at your school?" [P7].

The teachers' and principals' responses were similar. They indicated that videos, films, posters, brochures and pamphlets, kits, puzzles, books, models,

buttons, and charts were used. These responses suggested that teachers found it necessary to use resource materials in addition to the basic curriculum materials.

7. Teachers and principals were asked, "Are resource materials readily available?" [T13, P8].

The teacher's responses were: yes by 17 teachers, no by 11, some by 3, and other by 5. The "other" responses included: "I don't know", "no resource catalogue", "didn't look", "need more in French", and "as easy as is possible in the N.W.T.".

The principals' responses were: 5 - yes, 2 - no, and 1 - some.

From the teachers' and principals' responses, only 50% of the persons interviewed thought that resource materials were readily available.

8. Teachers were asked, "Have you read the introduction to the N.W.T. School Health Curriculum" [T20].

The answers to this question by the 36 teachers included: yes - 20 times, no - 15 times, and "don't remember" - once. Upon further probing, many teachers

could not remember what was in the introduction, and wondered if they had actually seen it because it had not been included with the material distributed for their grade.

It would appear that since most teachers had reviewed information specific to their grade, and the introduction section was distributed initially with the kindergarten section, in fact, few teachers had actually received the introduction. Also, if the teachers had read the introduction, it was not recently. Since many teachers were not given their own copy of the introduction, they were unable to access it readily for reference. This was especially true since no complete sets of the curriculum were found in the schools visited [Appendix 10].

9. Teachers were asked, "Do you have any comments about the introduction section of the curriculum?" [T21].

Of the 36 teachers interviewed, 30 had " no comments". The 6 teachers who had responded to this question, indicated that the information was clear and useful, but needed to be updated regularly. While answering a different question, 1 teacher who was

certain that she had read the introduction, suggested that "a scope and sequence would be a useful addition to the curriculum". In fact, scope and sequence were included in the introduction section of the curriculum. It, therefore, appeared that many teachers had not read the introduction, or if they had, they could remember little about it.

10. Teachers were asked, "Have you read the entire curriculum for the grade that you teach?" [T22].

Of the 36 teachers interviewed, 30 said yes, 5 no, and 1 responded by saying that "only the parts that could be found were read".

The teachers were then asked, "For the previous grade?" [T22].

Out of 34 possible responses (2 of the 36 teachers had been teaching only kindergarten and therefore could not have had access to the material for previous grade), 11 had read the material for the grade previous to the one they taught, and 23 had not read the curricular material for the previous grade.

The teachers were asked, "For the next grade?" [T22].

If 5 of the 36 teachers were excluded because they taught grade 9 and the curriculum was designed for K to 9, then of the 31 remaining teachers, 10 responded yes, 20 no, and 1 had read only the family life units.

The teachers were then asked, "The entire curriculum?" [T22].

All of the 36 teachers who were interviewed, said they had not read the entire curriculum.

Principals were asked, "Have you read the N.W.T. School Health Curriculum?" [P15].

The 7 principals and the 1 consultant replied: yes - 5, no - 0, parts - 3. All of the answers given by the principals and consultant were prefaced with "only skimmed".

It appeared that most teachers have not read much of the material beyond that of the grade they teach. As well, the principals have not read the curriculum in much detail.

11. The teachers were asked, "What preparation time is required to teach a class?" [T10].

Of the 36 teachers interviewed, 27 reported less than 30 minutes, 2 less than 60 minutes, and 7

provided other answers. "Other" included "varies by unit", "integrated with other themes", "three hours per unit, then 20 minutes per class", "some has to be translated into French but some can be taught in English, so it varies".

It can be concluded that 75% of the 36 teachers found it required less than 30 minutes of preparation to teach a class in health.

12. Teachers were asked, "How appropriate is the N.W.T. School Health Curriculum for the students you teach?" [[T24] and the principals were asked, "How appropriate is the N.W.T. School Health Curriculum for the students?" [P17].

The 36 teachers interviewed gave the following responses: very appropriate - 22, mediocre - 5, not appropriate - 8, and 1 other because "it was not in French".

An additional comment made by 9 Yellowknife teachers was that the curriculum was "too simple" for the Yellowknife students since they were more sophisticated, able to read more complex materials, and able to carry out research at more advanced

levels. On the other hand, several teachers who taught in Native communities reported that since some of the students in the grades they taught were older than would normally be in that grade and, therefore, those students needed advanced subject matter, but in a simple form.

The responses of the 7 principals and the 1 consultant were: very appropriate - 7 and mediocre - 1. The mediocre response was qualified with "this curriculum was the best curriculum in the N.W.T.".

It appeared that few persons interviewed found the curriculum inappropriate.

13. Teachers were asked, "In what health curricular activities are the students expected to participate? Do they?" [T25].

All of the teachers interviewed indicated that they used a wide range of activities such as role playing, games, story writing, puppets, lecture, books, debates, etc. to involve students.

In reply to whether students participated or not, the 36 teachers' responses were: yes/usually - 29, sometimes - 5, other - 2. The "other" responses included "willing to participate if teacher

participated" and "sometimes language is a problem".

From these responses it appeared that most students participated in health teaching activities and that a variety of activities were used when teaching health.

14. The principals and the groups were asked, "Has the introduction of the N.W.T. School Health Curriculum been easy?" [P1, G2].

Of the 54 persons interviewed, which consisted of 7 principals, 1 consultant, and 46 from the groups, 24 responded yes, 3 no, and 27 had other responses. Most of the "other" responses were "don't know", "easy in the lower grades" and "not in the higher grades".

15. The groups were asked, "Are the teaching strategies, materials, topics, etc. worthwhile?" [G9].

Most of the responses were positive.

In summarizing the data on the quality and practicality factor, the N.W.T. School Health Curriculum received generally favorable comments, but areas for improvement were identified. Minor revisions to this curriculum would, therefore, ensure higher quality and practicality.

Characteristics at the School District Level

The district's history of attempts at innovative change

Fullan [1982] maintained that attempts at change often end in frustration and wasted effort. Teachers are often sceptical when asked to make change, especially if they had previously been involved in effecting change which was unsuccessful or the results of which were unrewarding. Questions T19 and P14 addressed this issue.

1. Teachers and principals were asked, "In what other implementation projects have you been involved during the past year?" [T19, P15].

Of the 36 individual teachers interviewed, 21 responded that they had been involved in only a few implementation projects, 15 that they had been involved in no implementation projects, and none of the teachers said they had participated in many implementation projects.

The 7 principals and the 1 consultant all said they had been involved in a few implementation

projects during the past year.

If the responses of the teachers, principals, and consultant were added together, 15 [34%] said they had not been involved in any implementation projects during the past year, while 39 [66%] that they had been involved in a few.

2. As an extension of the above question, teachers and principals were asked, "In the past?" [T19, P14].

Among the 36 teachers, 15 responded that they had been involved in no implementation projects in the past, 12 had been involved in a few, and 9, in many implementation projects.

Of the 7 principals and the 1 consultant, 3 had been involved in few implementation projects, and 5 had been involved in many.

If the responses of the teachers, principals, and consultant are added together, 15 [34%] reported that they had not been involved in any implementation projects in the past, 15 [34%] had been involved in a few, and 14 [32%] had been involved in many implementation projects.

When evaluating the results of questions T19 and P14 with respect to the factor of the history of attempts at innovative change, it appeared that the majority [66%], had been involved in at least a few implementation projects. Additional comments made by many of the respondents were negative with respect to their success in previous attempts at implementation projects. This comment was worth noting, since as described by Fullan [1982], there could be a carry over effect from past failures to new attempts.

The adoption process

Fullan [1982] suggested that in the process of implementation, it was important to have teachers involved in planning and developing curricula. If this were not possible, then it was important to have teachers involved in the decision making process when implementing curricula. This consisted of giving individuals the flexibility to decide what worked and what did not. The following questions were used to address this factor: T18, P13, P30, G1, G9.

1. Teachers and principals were asked, "How many meetings have been held in your school

to discuss the N.W.T. School Health Curriculum?" [T18, P13].

Of the 36 teachers interviewed individually, 28 indicated that no meetings had been held, 5 reported involvement in 1 to 5 meetings, none reported that they had been involved in many meetings, and 3 provided other responses. The "other" responses included "1 meeting 3 years ago" and "health was included occasionally in departmental meetings but no meetings were dedicated to health". In fact, when probed further, the "other" responses implied no meetings of any significance took place.

The responses of the 7 principals and the consultant to the same question, indicated that, in 3 schools, no meetings had been held to discuss health, and in 5 schools between 1 and 5 meetings had been held. In these latter 5 schools, the 1 to 5 meetings were part of general staff meetings or meetings involving junior high health teachers who discussed physical education and health, but health played a minor role.

2. The groups were asked, "Are the teaching strategies, materials, topics, etc. worthwhile?" [G9].

This question was asked in the group interviews and overwhelmingly the responses were positive. The authors of the N.W.T. School Health Curriculum appeared to have considered and met teachers' needs. A few negative comments suggested that parts of the curriculum were "too easy" for the level of some students.

3. Principals were asked, "Were you a participant in piloting, developing, or in any way involved in the initial setting up for the curriculum?" [P30] and the groups were asked, "Were any of you participants in piloting, developing, or in any way involved in the initial setting up of the curriculum?" [G1].

Among the consultant and 7 principals, 4 had been involved, and 4 had not been.

Of the total of 54 interviewees including principals, vice principals, consultant, teachers, and teacher assistant, only 10 [18%] were initially

involved.

Fullan [1982] pointed out that if teachers and principals had been involved in planning and developing the materials, they tended to become more involved and active in the implementation process. Involvement in the development of the N.W.T. School Health Curriculum, was not the case, at least for the majority of persons interviewed.

To summarize the adoption process factor, few of the people presently involved in implementing the N.W.T. School Health Curriculum were involved in its planning and development. This could have a negative effect on implementation. As well, few meetings were held to discuss the health curriculum, a factor that could negatively affect how decisions were made, in what Fullan [1982] described as the "implementation-level process". Meetings might have assisted in exposing teachers to the entire curriculum, and in turn, aid the continuity of the scope and sequence of the curriculum.

In contrast, the strategies, materials, and topics contained in the curriculum materials evoked positive responses from the teachers. This could

serve to promote and aid the implementation process.

District's administration support

Fullan [1982] stated that demonstrated active support from administration, was seen as an indication of administration's commitment to implementation. Questions asked of teachers and principals were: T5, T11, T12, T13, T18, T27, T28, P5, P6, P7, P8, P13, P19, P20.

1. Teachers were asked, "Where can you access the N.W.T. School Health Curriculum?" [T5] and principals were asked, "Where can you or the teachers access the N.W.T. School Health Curriculum?" [P5].

The answers to these questions varied somewhat, but most principals believed that teachers had their own individual copy of the curriculum. Most of the teachers reported that they each had a copy of the sections of the curriculum for the grade they taught. This was seen by the teachers to be positive.

Many teachers were unaware that they did not have a complete curriculum for the grade they taught, or that a complete K to 9 health curriculum was not

accessible in their school if they had wished to review it [Appendix 10].

2. The teachers were asked, "What resource people do you involve?" [T11] and the principals were asked, "What resource people are being used at your school to assist in health?" [P6].

The 7 principals and the consultant reported that health professionals were used in 7 schools, community resource persons in 5, and educational professionals in 4 schools.

Among the 36 teachers, the responses were: health professionals used by 30 teachers, community resource persons by 26, and educational professionals by only 4 teachers.

Nurses and R.C.M.P. Officers were named most often in assisting in the school health curriculum. These contributors were not necessarily seen as support from the education administration since they were not employees of the Department of Education or the Regional Education Boards.

3. The teachers were asked, "What additional resource material do you use?" [T12] and

the principals were asked, "What additional resource materials are being used at your school to teach health?" [P7].

The responses from teachers and principals were similar and indicated that a variety of materials, for example, videos, pamphlets, and posters had been used. This confirmed that materials were available and were used.

4. Teachers and principals were asked, "Are resource materials readily available?" [T13, P8].

Responses from the 36 teachers were: 17 yes, 11 no, 3 some, and 5 other. The "other" responses included: "don't know", "didn't look", "need more in French", and "as easy as is possible in the N.W.T.".

Among the principals and consultant, 5 responded yes, 2 no and 1 some.

From the interview data, only 50% of all persons interviewed felt that resource materials were readily available.

5. The teachers and principals were asked, "How has the Regional Board and/or the Department of Education assisted/hindered

implementation of the N.W.T. School Health Curriculum?" [T27, P19].

Responses to the "assisted" part of the question were repeated by many of the 36 teachers. These included "inservice for teachers", "meeting on family life", "principal", and items which referred to the actual N.W.T. School Health Curriculum binders.

Responses to "hindered" from the teachers were varied but included responses like: "time allotment", "curriculum sent out in bits", "poor process of distribution", "need translation into French", "nothing since initial orientation".

The "assisted" responses given by the principals were similar to those of the teachers.

The principals' and consultant's responses to how the Boards or Department of Education "hindered" were: "too many new curricula", "need more money for inservice", "need coordinator", "few teachers have been orientated to health curriculum", and "supported in principle, but not in practice".

The Department of Education and Regional Boards were seen to be supportive of the teaching of health mainly because of their involvement in the development

and distribution of the N.W.T. School Health Curriculum. In the past, the Department of Education was also seen to be supportive, by providing inservice, meetings, and conferences. More recently, however, the Department of Education and the Regional Boards were seen to be hindering school health teaching by not providing inservice, orientation, and other support such as coordinators or consultants.

6. The teachers were asked, "How does the principal assist and/or hinder the implementation of the N.W.T. School Health Curriculum?" [T28].

The teachers' responses to how the principal "assisted" included: "helped with speakers", "liaison between school and community", supportive", "gave 1 teacher extra time to assist other teachers with health".

The "hindered" responses were: "no help", "no orientation", "lack of consultants", "lack of money". Some of these hindering factors are not normally seen to be the responsibility of principals, but the teachers' remarks could be interpreted to imply that in their minds, principals were equivalent to

administration. Administration might then include Department of Education employees, Regional Board members, and principals.

> The principals were asked, "How have you assisted the implementation of the N.W.T. School Health Curriculum?" [P20].

The 7 principals and the consultant responded: "supported by initial piloting", "introductory sessions", "parents' meetings", "helped in getting inservice", "personal contact", and 1 principal responded, "very little".

Generally, the teachers' and principals' responses were similar with respect to the number of ways principals had assisted in the implementation of the N.W.T. School Health Curriculum.

7. Teachers and principals were asked, "How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?" [T18, P13].

Of 36 teachers interviewed, 28 reported that no meetings had been held, 5 that they had been involved in 1 to 5 meetings, and 3 had other responses. The "other" responses upon probing indicated that no

meetings had been held. Therefore, 31 out of 36 teachers reported that no meetings had been held in their school.

The 7 principals and the consultant responded to this same question with: in 3 schools no meetings had been held, and in 5 schools 1 to 5 meetings had been held.

To summarize the factor of district administration support, the Department of Education and the Regional Boards were seen to support the teaching of health mainly because of their involvement in the development of the N.W.T. School Health Curriculum binder and accompanying materials, as well as in the distribution of the curriculum. The Department of Education, Regional Boards, and principals [principals were viewed by some teachers to be part of administration], were seen by the teachers not to be currently supporting the implementation of the N.W.T. School Health Curriculum. This perception was due to the lack of inservice, orientation, and coordinators' and/or consultants' support services for health.

Staff development and participation

Fullan [1982] maintained that this factor, which involves sustained interpersonal interactions, was key to implementation. Orientation prior to implementation, together with inservice and ongoing support, appeared to be critical elements. Questions that related to this factor were: T15, T16, T17, T18, T29, P10, P11, P12, P13, P21.

1. Teachers and principals were asked, "Did you receive an orientation to the N.W.T. School Health Curriculum?" [T15, P10].

Among the 36 teachers interviewed, 11 reported that they had been given an orientation, and 25 that they had not received any orientation.

Among the 7 principals and the consultant, 5 had received an orientation and 3 had not.

Among the 44 persons answering this question, including teachers, principals, and consultant, 26% had a least some orientation to the N.W.T. School Health Curriculum, and 74% had received no orientation whatsoever.

2. The teachers and principals were asked, "Have you received ongoing inservice

relating to the N.W.T.School Health Curriculum?" [T16, P11].

Among the 36 teachers interviewed, 11 reported that they had, and 25 that they had not received ongoing inservice.

Two, of the 7 principals and the 1 consultant, reported that they had received ongoing inservice, and 6 that they had not.

If teachers and principals are added together, for a total of 44, then 13 [30%] had received ongoing inservice and 31 [70%] had received no ongoing inservice.

3. Teachers and principals were asked, "Have you received ongoing support when using the N.W.T. School Health Curriculum?" [T17, P12].

Of the 36 teachers interviewed, 8 replied yes to receiving ongoing support, 25 no, and 3 I don't know.

Only 1, among the principals and the consultant reported receiving ongoing support, while 7 reported that they hand not received any ongoing support.

Again, if these groups are added together, 9 [20%] reported receiving ongoing support, 32 [73%] no

ongoing support, and 3 [7%] didn't know.

4. The teachers and principals were asked, "How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?" [T18, P13].

Among the 36 teachers, 28 reported that they had not been involved in school meetings relating to health, and 3 among the principals and the consultant said they had not attended any meetings. The majority [70%] of persons interviewed, had not been involved in formal meetings in which the N.W.T.School Health Curriculum had been discussed.

5. The teachers were asked, "In what ways do other teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?" [T29] and the principals were asked, "In what ways do teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?" [P21].

Most of the responses from both the teachers and principals were positive. The "assisted" responses from the teachers and principals included sharing "ideas", "resources", "teaching", and "speakers" as

well as, having "discussions" and being "supportive".

The "hindered" responses were: "being shot down by others", "inappropriate methods of student behavior control", "some teachers in senior grades have not dealt with own feelings", "social problems in the community", and "culture shock".

In summary it could be concluded from this data, that the impact of the factor of staff development and participation was mostly negative. The majority of teachers and principals interviewed had received no orientation, ongoing inservice, ongoing support, or little chance to discuss the health curriculum in meetings. They had however, received support from other teachers.

Time-line and information systems [evaluation]

Fullan [1982] suggested that unrealistic time frames for implementation are often imposed and/or expected. As well, Fullan [1982] thought collection of information was required in order to identify and resolve implementation problems. Questions used were: T10, T18, T20, T21, T22, P13, P15, G2, G11.

1. Teachers were asked, "Have you read the introduction to the N.W.T. School Health Curriculum?" [T20].

Of the 36 teachers interviewed, 20 thought they had read the introduction, 15 had not, and 1 teacher didn't remember.

2. The teachers were asked, "Do you have any comments about the introduction section of the curriculum?" [T21].

The few comments given included: "clear", "good information", "umbrella effect" and "needs to be regularly updated".

3. The teachers were asked, "Have you read the entire curriculum for the grade that you teach?" [T22].

Of a total of 36 teachers, 30 responded yes, 5 no, and 1 said that only the parts that could be found were read.

As an addendum to this question, the teachers were asked, "For the previous grade?" [T22].

The responses of the 36 teachers were: 11 yes, 23 no, and 2 had taught kindergarten and therefore had no

previous curriculum to read.

> The teachers when asked, "For the next grade?" [T22].

The 36 teachers gave 10 yes responses, 20 no responses, and 6 other responses. The "other" included 1 teacher who had read the next grade's family life unit and 5 teachers who had taught grade 9 and therefore had no higher grade material to read.

> Teachers were asked if they had read, "The entire curriculum?" [T22].

All 36 teachers replied that they had not done so.

> Then the principals were asked, "Have you read the N.W.T. School Health Curriculum?" [P15].

Among the 7 principals and the 1 consultant, 5 claimed to have read the curriculum and 3 had read only parts of it.

The responses of both the teachers and principals indicated that most of the interviewees were not familiar with the total curriculum and, therefore, the scope and sequence elements of the curriculum might not have been noted.

4. The teachers were asked, "What preparation time is required to teach a class?" [T10].

Of the 36 teachers interviewed, 27 responded that less than 30 minutes were required, 2 less than 60 minutes, and 7 had other responses. The "other" responses included: "integrated with other themes, so can't determine", "varies by unit", "depends on outside reading", "some has to be translated into French", and "three hours per unit then 20 minutes per class".

It appeared that generally, preparation time was minimal.

5. Teachers and principals were asked, " How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?" [T18, P13].

A total of 44 persons, comprising teachers, principals, and the consultant, answered this question. Since 31 of the 44 interviewees reported that no meetings had been held to discuss the N.W.T. School Health Curriculum, it may be concluded that meetings were not generally used as a tool to monitor implementation, collect data, and resolve

implementation problems.

6. The groups were asked, "Has the introduction of the N.W.T. School Health Curriculum been easy?" [G2].

Of the total of 54 interviewees, 24 thought the introduction had been easy, 3 that it had been difficult, and the remaining 27 provided other responses which consisted of: "easy in lower grades" [once], "not easy in higher grades" [3 times], and "don't know" [23 times].

7. The groups were asked, "When do you think the N.W.T. School Health Curriculum will be fully implemented across the N.W.T.?" [G11].

Most of those interviewed suggested that they didn't have a definitive answer. The responses given included: "don't know when the total curriculum will be available", "1 or 2 years", "5 years", "as implemented as it will ever be", and "in Yellowknife all doing it now".

The time required for implementation did not appear to be a problem, at least this was not articulated during the interviews. One reason for

this might be that the time required to prepare a health class was minimal because of the comprehensive nature of the material contained in the lesson plans. No one mentioned that an unrealistic time frame had been imposed.

In summary, the findings related to the factor of time-line and information systems, indicated that little, at least in a formal way, appeared to have been carried out to identify, and/or resolve implementation problems.

Board and community characteristics

Fullan [1982] noted the positive influence of community support on implementation. Questions used to address this factor were: P22, P23, G3, G4.

1. Principals and the groups were asked, "How receptive are the students to health education?" [22, G3].

Among the 7 principals' and the 1 consultant's responses, 7 reported that the students were very receptive to health education and 1 that the students were somewhat receptive.

Of the 54 interviewees, which included the 7

principals, the consultant, the teachers, and the groups [teachers, teacher assistants], 46 thought that students were receptive to health education, 4 that they were somewhat receptive, and 4 felt that they were receptive in the earlier grades, but not necessarily so in the higher grades.

2. The principals and the groups were asked, "How receptive is the community to the teaching of health in the school?" [P23, G4].

Among the 54 persons interviewed which included principals, consultant, and the groups, 18 suggested that the community was very supportive, 17 thought the community was somewhat supportive, and there were 17 other responses. "Other" responses included "don't know", "no feedback", and "health not a priority". It was interesting to note that of the 7 principals and the 1 consultant [8 of the 54], only 2 felt that the community was "very supportive" and 6 had other responses. These "other" responses included: "don't care", "education not important", "family life a problem", and "nurses liked it". It therefore appeared that the principals' and teachers' views of

support from the community were somewhat different.

To summarize the data for the factor of board and community characteristics, the interviewees felt that students were generally receptive to health education, that some community members were also generally receptive, but many members of the community did not appear to care. At least, the community members did not appear to oppose the teaching of health in the schools. Fullan [1982] suggested that community support was an important factor for implementation.

No direct interview questions were asked concerning how many children were kept out of the health classes by parental request, but each principal revealed this information when commenting on other issues during the interviews. In the 6 schools visited, all students attended health classes but the parents of approximately 10 students refused to allow their children to attend classes on family life. Interestingly, the majority of withdrawals occurred in one school.

School-Level Factors

The role of the principal

Fullan [1982] maintained that principals' attitude, as demonstrated by their input and example, play a key role in facilitating optimum implementation. Questions T18, T26, T28, P3, P13, P18, P20, P31, P32, P33, P34, P35, G5, G6, were all used to examine this factor.

1. The principals were asked, "Are you comfortable that your teachers are required to teach health?" [P3].

Among the 7 principals and the consultant, 5 were very comfortable, 2 moderately comfortable, and 1 was only somewhat comfortable. None admitted to being uncomfortable.

Fullen [1982], suggested that a positive attitude by the principal and/or consultant to teachers teaching health, would be seen by the teachers as helping to facilitate implementation.

2. Teachers were asked, "How does the principal assist and/or hinder the implementation of the N.W.T. School Health Curriculum?" [T28].

Most teachers responded positively to this question and hence there were more comments about "assisting" than "hindering" . The "assisting" responses included: "positive attitude", "need help just ask", "behind us", "if problems just speak to the principal", "rebound things off the principal", "encouraging", "just passes on things", "supportive", "meetings to discuss family life", "gives 1 teacher extra time to assist other teachers with health", "expects us to teach and get on with it", "newsletters and memos to teachers", "helped with speakers", and "liaison between community and school".

Comments made by some teachers in response to "how does the principal assist the implementation" appeared to suggest that support was not real, hence the responses are suspect. The "assisting" comments included: "no help", "not either assist nor hinder", "just passes on things", "doesn't check", "doesn't get in the way", "left up to teachers", "neutral", and "I don't know".

The responses given by the teachers when asked how the principals "hindered" implementation included: "no help", "no orientation", "too many constraints", "lack of money", and "lack of consultants".

The principals were asked, "How have you assisted the implementation of the N.W.T. School Health Curriculum?" [P20].

Several of the principals admitted that they had not given the implementation of the N.W.T. School Health Curriculum much thought, others responded by a long pause, which suggested that they too had not given implementation much thought.

One principal explicitly stated that "the notion of the principal's responsibility with regard to assisting in the implementation of the health curriculum was something to be looked at further--[by himself]". In that principals's school, mathematics, science, and language arts, were assigned teachers to assist the regular teachers, but health had no such resource support.

It could be concluded that the principals felt that their role in implementation of school health was relatively minor. Fullan [1982] pointed out that the principal does indeed play a major role in implementation.

3. The teachers and principals were asked, "If you have suggestions for changes to the N.W.T. School Health Curriculum to whom

would you submit them?" [T26, P18].

Few teachers stated that they would submit suggestions for changes to the principal or would even consider discussing the subject with the principal at their school. Many teachers did not know through whom suggestions should or could be channelled, or whether their suggestions would be welcome.

The principals' answers to whom recommendations should be submitted were: directly to the Department of Education, to the Regional Board and copied to the Department of Education, and to the consultant and then to the Department of Education. The principals seemed to feel that suggestions for change would be welcomed by the N.W.T. Department of Education. An interesting observation was that the principals all knew the Department of Education's Health Consultant by name, but not by that person's previous, or present title.

4. The teachers and principals were asked, "How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?" [T18, P13].

The responses from the 36 teachers were: 28 had attended no meetings to discuss the school health

curriculum, and 8 had attended 1 or more meetings.

Likewise, all of the principals interviewed said there had been no meetings specifically on school health at their schools, but school health had been occasionally included in general staff meetings.

5. The groups were asked, "What have made things easier for you to teach health?" [G5].

Many factors were mentioned for example the availability of resource material, the curriculum, compulsory curriculum, nursing station support, but only a few teachers reported that principals had facilitated implementation of health.

6. The groups were asked, "What barriers or obstacles have you experienced to teaching health?" [G6].

A few barriers such as different culture, high staff turnover, lack of consultants, and no orientation, were identified but some teachers suggested that the principals had inhibited implementation.

7. The principals were asked, "How many years have you been teaching?" [P31].

Of the 7 principals and the consultant

interviewed, all had taught more than 5 years.

8. Principals were asked, "How many years have you been teaching in the N.W.T.?" [P32].

Among the 7 principals and the consultant, 6 had been teaching in the N.W.T. for more than 5 years, 1 for 2 years, and 1 for 1 year. The 2 who had taught in the N.W.T. for less than 5 years had extensive previous "northern experience" in other parts of Canada.

9. The principals were asked, "How many years have you been a principal?" [P33].

Of the 6 principals interviewed, 4 had been a principal for more than 5 years, 1 for 3 years, and 1 for 1.5 years.

10. Principals were asked, "What are your educational qualifications?" [P35].

Of the 7 principals and the consultant interviewed, 5 had a degree in Education and other certificates and/or diplomas, 1 had a B.A. plus a teachers' college diploma, 1 had a B.A. and a M.Ed., and 1 had a B.Sc., a M.Sc., and a PH.D in Education and Administration.

11. The principals were asked, "What university or other courses have you taken in health and/or science?" [P34].

Among the 7 principals and the consultant, 4 had taken a university health course, 3 had taken a university science course, 1 a counselling course, and 1 had taken a physical education methods course. Viewing this information from a different perspective, 4 of the group of 8 had not taken a health course and 5 had not taken any science courses.

To summarize the factor of the role of the principal, few overall positive or negative comments were made by the teachers about principals' involvement in facilitating or hindering the implementation process. Although the teachers did not feel that the principal hindered the implementation of school health, few of them identified the principal as assisting implementation. It did not appear that teachers generally expect a lot of input from principals and in general principals held few meetings to discuss the health curriculum.

Teachers did not think that their suggestions for change to the N.W.T. School Health Curriculum should be directed to or even discussed with principals. As

well, most teachers did not think that their suggestions would be welcomed by anyone in the Department of Education.

The general pattern of the number of years the principals had taught and had been principals revealed that they were generally experienced and qualified, and had either been teaching in the N.W.T. for some time or had other "northern experience".

Among the 7 principals and the 1 consultant, only 4 [50%] had taken a health course at university and only 3 [37%] had taken even 1 university science course. This academic background was found to be similar among the teachers. [Appendix 7, T34 and T35].

Basch [1984] and Owen [1985] suggested that teachers with a science background and/or had extensive orientation followed up with ongoing support, were more successful in the implementation of school health. As well, even though not explicitly stated but alluded to in the literature, is a principal who has a science background or has received orientation followed with ongoing support, would be positively disposed to the implementation of a school health program.

Teacher-teacher relationships

Fullan [1982] maintained that the extent of teachers' interaction was an important factor in facilitating the assimilation of the new skills required for implementation. He cited trust, support, and communication as important components of interaction. Questions that were used to examine this factor were T17, T18, T29, T30, P21.

1. The teachers were asked, "Have you received ongoing support when using the N.W.T. School Health Curriculum?" [T17].

Of the 36 teachers interviewed, 25 responded no, 3 I don't know, and 8 yes. Some of the 8 teachers who answered yes, added that the source of support was other teachers. Some of these 8 teachers also mentioned that they received support from school administration and parents.

Two teachers at one school specifically reported that a teacher had been assigned to assist other teachers with health. The designation of one teacher to assist in the health program was seen as positive, and was well received by the teachers at the school where it was practised.

2. Teachers were asked, "How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?" [T18].

Of the 36 teachers who responded to this question, 28 reported that no meetings had been held, 5 that between 1 and 5 meetings had been held, and 3 provided other responses. Upon closer examination, these "other" responses implied no meetings to bring to 31 [86%] the number of teachers who reported that no meetings had been held.

These responses indicated that most teachers did not discuss health at formal meetings. The important elements of trust, support, and communication as described by Fullan [1982] were, therefore, not enhanced by meetings.

3. Teachers were asked, "In what ways do other teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?" [T29].

The majority of the 36 teachers indicated ways that "assisted" such as "sharing ideas", "team teaching", "sharing teaching", "discussions", and "being supportive". These indicated that trust had

been developed and that support and communication had occurred.

The few "hindered" responses from the teachers included "being shot down by others", "some teachers uncomfortable with certain topics", and "some teachers in senior grades not having dealt with own feelings". These responses suggested that the promotion of trust, support, and communication, had not occurred among all of the teachers.

> The principals were asked, "In what ways do teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?" [P21].

The 7 principals and the consultant responded to the "assisting" part of the question with: "talking to each other", "collaboration", "ideas between teachers", and "support".

The responses given by the principals were similar to those of the teachers and both the teachers and principals reported that there was generally a degree of support, trust, and communication between teachers.

The principals and consultant responded to the part of the question, "in what ways do teachers

"hinder" implementation", by stressing that the difficulties the teachers encountered were not necessarily due to factors over which teachers normally had control. Comments given by the principals and consultant were: "social problems of the community", "culture shock", "alienation in a Native northern community", and "in family life, how far to go without parents' consent". Some of these responses could perhaps be perceived as an indication in the principals' perception of insufficient communication between the teachers.

4. The teachers and principals were asked, "What type of inservice training in health education would be of most benefit to you now?" [T30, P27].

As many as 67 answers were provided by the 36 teachers. Orientation was suggested by 11 teachers, 9 suggested more content, 8 wanted teaching methods, 17 requested teacher sharing sessions and there were 22 other varied responses. The request for teacher sharing sessions was made by almost 50% of the teachers.

Among the 7 principals and the 1 consultant, there were 15 responses for inservice training in

health education. Their suggestions included: orientation [7], teacher sharing [2], content [1], teaching methods [11], and others [4]. The "other" included "family life", "refresher course", and "more time".

To summarize the factor of teacher-teacher relationships, there appeared to be few formal mechanisms in place to foster trust, support, and communication and to ensure that resocialization of teachers occurred. There appeared, however, to be various informal mechanisms as reported by both teachers and principals, which assisted in the implementation of the health curriculum.

Teacher characteristics and orientation

Fullan [1982] suggested that a sense of efficacy was a cause why some teachers implement change and others do not. Basch [1984] and Owen [1985] when discussing health education, also suggested that teachers with a science background and/or had received extensive orientation followed up with ongoing support, were more successful in the implementation of school health. Questions that explored this factor were: T1, T2, T3, T15, T16, T17, T29, T31, T32, T33,

T34, T35, G1, G8, P2, P24.

1. The teachers were asked, "Do you teach health?" [T1].

All of the teachers interviewed said that they were directly involved in teaching school health.

2. The teachers were asked, "How many years have you been teaching?" [T31].

Of the 36 teachers interviewed, 6 [17%] had taught for less than 2 years, 10 [28%] for between 2 and 5 years, and 20 [55%] for 5 years or more. The distribution of teaching experience was similar among all of the K to 9 teachers.

The differences in teaching experience between the largest community (Yellowknife), and the smaller communities is shown in Table 3.

Table 3 Comparison of Teaching Experience

	Smaller Communities		Yellowknife	
No of Years Teaching	No. of Teachers	% of Teachers	No. of Teachers	% of Teachers
<2 years	5	[31%]	1	[5%]
2-5 years	6	[37%]	4	[20%]
>5 years	5	[31%]	15	[75%]
Total	16	[100%]	20	[100%]

3. Teachers were asked, "How many years have you been teaching in the N.W.T.?" [T32].

Among the 36 teachers interviewed, 10 [28%] had taught in the N.W.T. for less than 2 years, 13 [36%] for between 2 and 5 years, and 13 [36%] for more than 5 years.

Generally, the Yellowknife teachers interviewed had served longer in the N.W.T., than the teachers in the smaller communities [Table 4].

Table 4 Comparison of Teaching Experience in N.W.T.

	Smaller Communities		Yellowknife	
Years Teaching in N.W.T.	No. of Teachers	% of Teachers	No. of Teachers	% of Teachers
<2 years	9	[56%]	1	[5%]
2-5 years	5	[31%]	8	[40%]
>5 years	2	[13%]	11	[55%]
Total	16	[100%]	20	[100%]

4. The teachers were asked, "What grade level do you teach?" [T33].

Among the 36 teachers interviewed, 20 taught K to 3, 11 grades 4 to 6, and 5 grades 7 to 9. All grade levels were represented in the interviews, but since

some teachers taught split classes and 2 teachers taught grade 6 to 9, it was difficult to report in table form, the number of teachers interviewed by grade and community.

5. Teachers were asked, "What are your educational qualifications?" [T35].

Of the 36 teachers interviewed, 28 had a degree in education, 3 had a diploma in education, 2 reported that they had a teaching certificate, 1 teacher was a graduate of the teacher education program at Thabacha College, N.W.T., and 2 had other qualifications.

Besides the basic teaching qualification, 13 teachers reported having a B.A. degree, 1 a B.Sc. degree, 1 had an Education Administration Certificate, 2 had M.A. degrees, 4 had M.Ed. degrees, and 1 teacher had a PH.D. in Education and Administration.

There appeared to be little difference in teachers' qualifications in the various communities or schools. It was noteworthy that only 1 teacher had a B.Sc. degree which would, according to the literature, be considered beneficial to teaching health [Basch, 1984; Owen, 1985].

6. The Teachers were asked, "What university or other courses have you taken in health

and/or science?" [T34].

Of the 36 teachers interviewed, 13 had taken a health course at university, 23 had taken no university health courses, 22 had taken at least 1 university science course, while 14 had taken no university science courses. It was noted that the majority of teachers had not taken any health related courses, but had taken at least 1 science course. Most of the teachers interviewed, revealed that they had in fact taken only 1 science course. This would not then be considered a science background.

7. Teachers were asked, "How many years have you been teaching health in the N.W.T.?" [T2].

Only 1 teacher had taught health in the N.W.T. for less than 1 year, 11 reported 1 year, 9 teachers 2 years, and 15 more than 2 years. If the 10 teachers who had taught for less than 2 years in the N.W.T. as reported in question T32 were not considered, then 24 out of 26 teachers had been teaching health in the N.W.T. for at least 2 years. This 2 year period coincided with the time during which the first units of the N.W.T. School Health Curriculum had become available to all teachers across the N.W.T..

8. The teachers were asked, "How comfortable are you in teaching health?" [T3].

Of the 36 teachers interviewed, 20 reported that they were very comfortable, 7 were moderately comfortable, 3 were somewhat comfortable, 1 was uncomfortable, and 5 had other responses. The "other" responses included: "comfortable in lower grades but not upper grades", "comfortable in areas where had inservice", and "comfortable on all areas except family life and sexual abuse".

If teachers were not comfortable, then their feeling of efficacy according to Fullan [1982], may be reduced and/or their perception of making a difference might be diminished.

9. Teachers were asked, "Did you receive an orientation to the N.W.T. School Health Curriculum?" [T15].

The responses from the 36 teachers were: 11 yes and 25 no.

10. The teachers were asked, "Have you received ongoing inservice relating to the N.W.T. School Health Curriculum?" [T16].

Only 7 of the 36 teachers reported that they had received inservice, and the remaining 29 reported that

they had received no ongoing inservice relating to the N.W.T. School Health Curriculum.

11. The teachers were asked, "Have you received ongoing support when using the N.W.T. School Health Curriculum?" [T17].

To this question, 8 teachers responded yes, 25 no, and 3 said they "didn't know".

The responses to questions T15, T16, and T17, suggested that the majority of teachers had not received orientation, inservice, nor ongoing support in relation to the N.W.T. School Health Curriculum.

According to Fullan [1982], a lack of orientation and ongoing support, in conjunction with the teachers lack of science background [Basch, 1984 and Owen, 1985], could impair the implementation of a school health program.

12. Teachers were asked, "In what ways do other teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?" [T29].

Most of the teachers responded that other teachers "assisted" by "sharing ideas", "sharing resources", "team teaching", "discussions", and being "supportive". Most of the teachers felt that other

teachers were supportive and thus assisted greatly in implementation of the health curriculum.

The "hindered" responses were less frequently reported by the teachers, but these responses included: "being shot down by others", "not enough audio visual equipment", "some teachers uncomfortable with certain topics", "some teachers in senior grades have not dealt with their own feelings", and "inappropriate methods of student behaviour control" .

13. The groups were asked, "Were any of you participants in piloting, developing, or in any way involved in the initial setting up of the curriculum?" [G1].

Of the 54 persons interviewed, including principals, vice-principals, consultant, teachers, and teacher assistant, only 10 were involved in the initial stages of the curriculum development. Among the 45 teachers, only 6 [13%] were initially involved in setting up the curriculum.

If participation in setting up the curriculum gave a sense of being able to influence implementation, then this small number of participants would not significantly contribute to efficacy as described by Fullan [1982].

14. The principals and the groups were asked, "Does the N.W.T. School Health Curriculum make a difference to the students' behavior/attitude?" [P24, G8].

Of the 54 persons interviewed, only 10 responded yes, 2 no, and 42 had other responses. The "other" responses included "I hope so" and "I don't know".

If the teachers did not believe that they were making a difference, then according to Fullan [1982], the sense of efficacy would be reduced. The 7 principals' and the consultant's responses to this question [8 of the 54 interviewed] were similar to the teachers'.

In summarizing the teacher characteristics and orientation factor, the teachers interviewed were generally well qualified, experienced, and for the most part, had taught for more than 2 years in the N.W.T.. It should be noted that while few teachers had a background in science or health, almost 20% of them had post graduate degrees. Few teachers reported having received formal orientation, inservice, or ongoing support in health, but most reported receiving assistance and informal ongoing support from other teachers.

Few teachers felt that teaching health made a difference, and it could be concluded that most teachers' "sense of efficacy" as described by Fullan [1982], was not high. When examining the teacher characteristics and orientation factor, both positive and negative aspects were seen to be involved in the implementation process.

The External Environment

Government agencies

Fullan [1982] maintained that government agencies underestimate the difficulties involved in implementation, so they tend to force new programs, policies, and legislation upon school boards and, ultimately, on teachers. Questions T27, P19, P29, G11 were used to address this factor.

1. Teachers and principals were asked, "How has the Regional Board and/or the Department of Education assisted/hindered implementation of the N.W.T. School Health Curriculum?" [T27, P19].

The responses from the teachers interviewed, indicated that they consider the principal, Regional

Board, and the Department of Education as one and the same, that is, administration. The teachers' "assisted" responses included "inservice for teachers", "complete lesson plans", "provided materials" [N.W.T. School Health Curriculum], and "don't know".

The "hindered" responses included "time allotment", "need more materials and training", "nothing since initial orientation", "need translation into French", "curriculum sent out in bits", "poor process of distribution", "need a scope and sequence", "should be mandatory to teach family life", and "don't know". Most of the teachers thought that more time and resources in the form of ongoing support and inservice, were needed to assist in implementation.

The principals' responses to the question of "how the Regional Board and the Department of Education assisted in implementation", were more specific with respect to the responsibilities of Regional Boards and the Department of Education. The principals' responses included: "support in dollars", "internal inservice", "supported in principle", "providing detailed curriculum", but some responded with "don't

know".

The "hindered responses from the principals and consultant were: "need money for inservice", "need coordinator", "short staffed, lacking consultants", "board should provide inservice days for health", "few [teachers] have been orientated to health curriculum", "supported in principle but not in practice".

Although the initial preparation and distribution of the curriculum were seen as positive, little or no follow up was provided by the Department of Education and the Regional Boards. The Department of Education and Regional Boards however, expected the curriculum to be implemented.

2. Principals and the groups were asked, "When do you think the N.W.T. School Health Curriculum will be fully implemented across the N.W.T.?" [P29, G11].

The responses from these interviewees were: "don't know", "1 to 2 years", "don't know when all the pieces of the curriculum will be available", "sexual abuse, there is no backup, consultant told not to teach until there is backup", "5 years if the department sticks to it", "probably as implemented as it will ever be", "in Yellowknife all doing it", and

"is implemented at present".

In summary, the initial development and distribution of the N.W.T. School Health Curriculum was viewed positively by the teachers. Since little orientation, inservice, and ongoing support had been provided to assist teachers in the implementation of the N.W.T. School Health Curriculum, teachers and principals saw the Regional Boards and the Department of Education as underestimating the difficulties inherent in the implementation of the curriculum. This lack of adequate ongoing support could impact negatively on the government agencies factor.

External assistance

Fullan [1982] maintained that teachers and principals viewed support for implementation of a program by the amount of resources allocated to that program. Questions used to explore this factor were: T5, T13, T15, T16, T17, T30, P5, P8, P10, P11, P12, P25, P26, P27, P28, P30, G1, G5, G6, G10.

1. The teachers were asked, "Where can you access the N.W.T. School Health Curriculum?" [T5] and the principals were asked, "Where can you or the teachers

access the N.W.T. School Health Curriculum?" [P5].

Most of the principals thought the teachers had their own copy of the curriculum. The teachers reported that they had been issued or shared a copy of the grade they were teaching and could obtain a complete K to 9 curriculum in the resource centre/library of their school.

All of the teachers and principals were confident that in their school, there was a complete K to 9 curriculum. Interestingly, the check list [Appendix 10] in fact, revealed that there were no complete K to 9 curriculum readily available at any of the 6 schools visited.

The complete N.W.T. School Health Curriculum was not actually available to the teachers and principals, but the individuals interviewed perceived that the materials were available. This perception would contribute positively towards the external assistance factor listed by Fullan [1982].

2. The teachers and principals were asked, "Are resource materials readily available?" [T13, P8].

Of the 36 teachers interviewed, 17 responded yes,

11 no, 3 some, and 5 and other responses. The "other" responses included: "don't know", "didn't look", "depends on unit", "as easy as is possible in N.W.T.", and "need more in French".

The responses of the 7 principals and the consultant were 5 yes, 2 no, and 1 some.

When the 44 combined responses [7 principals, 1 consultant, and 36 teachers] were examined, only 50% thought that resource materials were readily available. If the majority of teachers and principals perceived that the Department of Education had provided adequate resource materials, then this would contribute positively to implementation, however, 50% is not a majority.

3. "Did you receive an orientation to the N.W.T. School Health Curriculum?" [T15, P10].

Among the 36 teachers interviewed, 11 responded that they had received orientation and 25 had not.

Of the 7 principals and the consultant, 5 reported that they had received an orientation and 3 that they had not.

The majority of teachers and principals interviewed, therefore, had not received an orientation. This would contribute negatively to implementation according to Fullan's [1982] external assistance factor.

4. Teachers and principals were asked, "Have you received ongoing inservice relating to the N.W.T. School Health Curriculum?" [T16, P11].

Of the 36 teachers interviewed, 7 responded that they had received inservice, and 29 that they had not.

Similarly, of the 7 principals and the consultant interviewed, only 2 reported having received inservice.

The overwhelming majority of interviewees responded that they had not received ongoing inservice, a factor that might negatively impact on implementation.

5. The teachers and principals were asked, "Have you received ongoing support when using the N.W.T. School Health Curriculum?" [T17, P12].

Of the 36 teachers interviewed, 8 responded that they had received ongoing support, 25 that they had

not, and 3 responded with "I don't know".

Among the 7 principals and the consultant, 1 responded that they had received support, and 7 that they had not received ongoing support.

Again, the majority of interviewees responded that they had not received ongoing support, a factor that would negatively impact implementation.

6. The principals and groups were asked, "Were any of you participants in piloting, developing, or in any way involved in the initial setting up of the curriculum?" [P30, G1].

Of the total of 54 person interviewed, only 10 had been involved in the initial setting up of the curriculum. Since the majority of those interviewed had not been involved in the planning of the curriculum and/or in the needs assessment, those interviewed might not fully appreciate the initial commitment of the Government of the N.W.T. to developing the N.W.T. School Health Curriculum.

7. The groups were asked, "What have made things easier for you to teach health?" [G5] and the principals were asked, "What factors have made it easier to teach health

in your school?" [P25].

The responses of the teachers and principals were: "the actual curriculum", "a curriculum binder for each grade", "curriculum relevant to health needs", "complete lesson plans", and "resource material available". Other perceived government support mentioned were: "organized meetings on family life with support from the Department of Education", "teacher coordinator in school for support", and "consultant".

Both the teachers and principals appeared to acknowledge that some support had been provided and had been arranged with external bodies, directly or indirectly, by the Department of Education.

8. The groups were asked, "What barriers or obstacles have you experienced to teaching health?" [G5] and the principals were asked, "What barriers or obstacles to teaching health have you encountered in the school?" [P26].

Almost all of the teachers and principals were aware of obstacles. Most of their responses included inadequate resources. Examples of these responses were: "lack of planning time", "need resource centre

catalogue", "consultants lacking", "lack of yearly orientation", "lack of inservice", "lack of awareness by elementary teachers of seriousness of health", "lack of money", "culture", "planning time", and "not enough training".

Comments specific to the N.W.T. School Health Curriculum materials were: "didn't have own copy", "not in French", "process of distribution", "need more drugs and alcohol", "growth and development and family life jumped around", "alcohol and drugs units not in with the grade", "level too high", "level too low", "too long", and "need tests".

9. The principals and the groups were asked, "What would assist you in further implementing the N.W.T. School Health Curriculum?" [G10, P28].

Many suggestions were offered by the 54 persons interviewed. The most frequent responses included: "catalogue from resource centre", "teachers' meetings to discuss curriculum," "teachers' course on health", "orientation for teachers", "teacher sharing and updating regularly", "consultants for ongoing support in schools on health", "resource people from Yellowknife", "time", "another letter from Department

of Education in support for compulsory time in health", "evaluation for all teachers towards health", "teacher coordinator in each school", "special teacher to teach health", "need philosophy highlighted", "need more technical information", "photos in alcohol and drugs to be enlarged", "need integration of AIDS and STD's, family life, and growth and development", "translation into French" and "AIDS for parents".

The majority of responses did not point to items directly related to the curriculum itself, but instead, identified the need for resources to be applied to orientation, ongoing inservice, and ongoing support.

10. The teachers and principals were asked, "What types of inservice training in health education would be of most benefit now?" [T30, P27].

Among the 7 principals and the 1 consultant, 15 responses were given. Orientation was given 7 times, content once, teaching methods once, teacher sharing twice, and 4 other. The "other" responses included: "family life", "refresher course", and "time".

The 36 teachers gave a total of 67 responses which included orientation [11 times], content [9 times], teaching methods [8 times], teacher sharing sessions [17 times], and other responses [22 times]. The "other" responses given by the teachers were: "hands on workshop", "brainstorming", "inservice", "resource list for teachers", "model how to approach sexual abuse", "observe actual teaching", "new units need inservice", "AIDS information", "updated information", "don't know what is available", "review of philosophy and objectives", and "course at university".

To summarize the impact of the factor of external assistance, more support for teachers was seen to be required in the areas of orientation, inservice, and ongoing support, if health education was to be seen as important.

Summary of Data

The following matrix [Table 5] summarizes the data in terms of: Fullan's 15 implementation factors, questions used to examine each factor, and items which assisted and/or hindered implementation.

Table 5 Summary of Analysis and Interpretation of Data

Factor	Questions	Assisted Implementation	Hindered Implementation
1. Need & Relevance	- no specific questions - general information	- need for health teaching was recognized by teachers and principals	
2. Clarity	- T14, P9	- specific departmental directive (90 min /week)	- majority of teachers do not know about directive or chose not to follow directive
3. Complexity	- T23, P1, P16 G2, G7	- curriculum not complex - curriculum easy to use	
4. Quality and Practicality of Program	- T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T20, T21, T22, T24, T25, P1, P4, P5, P6, P7, P8, P17, G2, G9	- health curriculum being used - perceived to have access to complete curriculum - good component parts - used resource people - used additional resource material - read own grade - preparation time minimal - appropriate materials - students participate - good strategies - generally, favorable comments	- complete curriculum not available in schools - teachers perceive not adequate resource materials - majority have not read introduction - introduction not distributed to all teachers - no one read entire curriculum - some areas of curriculum need improvement
5. District's History of Attempts at Innovative Change	- T19, P14	- most had been involved in the past with implementation projects	- most of the past implementation projects were not positive

Table 5 Summary of Analysis and Interpretation of Data continued

Factor	Questions	Assisted Implementation	Hindered Implementation
6. Adoption Process	- T18, P13, P30, G1, G9	- strategies, materials and topics good	- few current teachers more involved in initial planning and developing of curriculum - few meetings were held to discuss health
7. District Administration Support	- T5, T11, T12, T13, T18, T27, T28, P5, P6, P7, P8, P13, P19, P20	- development and distribution of curriculum - support given in the past with inseravice, meetings, and conferences - additional resources materials being used	- no orientation, inservice, and ongoing support recently - no consultants or coordinator for health - few meetings held - not enough resource materials available
8. Staff Development and Participation	- T15, T16, T17, T18, T29, P10, P11, P12, P13, P21	- support from other teachers	- no orientation, inservice, and ongoing support - no meetings held to discuss health
9. Time-line and Information Systems (evaluation)	- T10, T18, T20, T21, T22, P13, P15, G2, G11	- time requirements minimal - curriculum constructed by grade	- little carried out to identify, collect and resolve implementation problems
10. Board and Community Characteristics	- P22, P23, G3, G4	- students receptive to health education - no community opposition to school health - all students attended health classes	- most community members did not care about health being taught - 10 students were kept away from family life classes

Table 5 Summary of Analysis and Interpretation of Data continued

Factor	Questions	Assisted Implementation	Hindered Implementation
11. Role of Principal	- T18, T26, T28, P3, P13, P18, P20, P31, P32, P33, P34, P35, G5, G6	- teachers expectations not great of principal's role in implementation - principals experienced, well qualified, had "northern experience" - principals had a positive attitude towards teachers teaching health	- teachers didn't discuss with principal changes or concerns about health - teachers didn't think anyone would welcome suggestions for change - few meetings to discuss health - few principals with science and/or health background - principal didn't see his/her role as major in implementation
12. Teacher-Teacher Relationships	- T17, T18, T29, T30, P21	- other teachers informally gave support	- few formal mechanisms in place to increase resocialization or to factor trust, support and communication - few meetings, no orientation, in service, or on-going support
13. Teacher Characteristics and Orientation	- T1, T2, T3, T15, T16, T17, T29, T31, T32, T33, T34, T35, G1, G8, P2, P24	- teachers well qualified, experienced and most in the North for more than 2 years - 20% hold post gradute degrees - teachers received informal support from other teachers - most hd taught health in N.W.T. for 2 or more years - most teachers comfortable in teaching health	- few teachers received orientation inservice or ongoing support - few meetings held to discuss health - few teachers felt that teaching health made a difference - sense of efficacy not high - few teachers had a background in science and/or health - few teachers had been initially involved in development of a curriculum

Table 5 Summary of Analysis and Interpretation of Data continued

Factor	Questions	Assisted Implementation	Hindered Implementation
14. Government Agencies	- T27, P19, P29, G11	- initial development and distribution of curriculum	- little support seen recently by way of orientation, inservice, ongoing support - no resource centre catalogue - saw administrators as including government employees, board members, principals
15. External Assistance	- T5, T13, T15, T16, T17, T30, P5, P8, P10, P11, P12, P25, P26, P27, P28, P30, G1, G5, G6, G10	- perceived to have easy access to a complete curriculum - some support from outside the school	- few had been initially involved in development of curriculum - complete curriculum not available in schools - teachers perceive not adequate materials, resources - most did not receive orientation, inservice and ongoing support - no resource centre catalogue - no consultants and/ or coordinators

Chapter 5

Conclusions and Recommendations

Summary

In 1987, the Government of the N.W.T. Department of Education developed and circulated for implementation, G.N.W.T. School Health Curriculum. This thesis is a descriptive study which attempts to determine the extent to which this curriculum was implemented in six schools in three Northwest Territories communities. A preliminary examination of the type carried out was perceived to be worthwhile since the results would indicate the questions and methods that could be appropriately employed in future comprehensive evaluations of the curriculum.

The study described the implementation status of the health curriculum by checking the availability of the N.W.T. School Health Curriculum in the schools, and by interviewing persons directly involved in teaching school health. A detailed curriculum checklist was employed to ensure if the entire

curriculum was available in each school. Three sets of interview questions were used, one for individual health teachers, one for individual principals, and one for groups that consisted of persons directly associated with teaching health such as teachers, teacher assistants, principals, vice-principals, and educational consultants.

The questions, analysis and interpretation of the data were based on the 15 factors on implementation developed by Fullan [1982].

Conclusions

The major question concerned whether or not the N.W.T. School Health Curriculum had been implemented and taught to students in kindergarten to grade nine. In fact, it was evident from the study, that the curriculum had not been implemented as planned. This situation is not unique, for as the literature suggests, at best, implementation may be partial, but rarely complete [Fullan, 1982; Fullan and Park, 1987; Glatthorn, 1987; Kirst and Meister, 1985; Wong, 1985].

The subsidiary research question 1 to 8, examined

the extent of implementation, as well as the factors that hindered and/or facilitated implementation.

1. How many teachers are aware of the N.W.T. School Health Curriculum? In fact all of the teachers and principals interviewed in the 6 schools were aware of the curriculum.

2. How many teachers are currently teaching health? Most of the elementary teachers taught health to their homeroom classes while the teachers who taught health in junior high, were specialty teachers who taught health plus physical education or other specialty courses. While these teachers did report that they taught health, the majority of the teachers did not devote as much time to teaching health as was directed or recommended.

3. How many teachers have access to the N.W.T. School Health Curriculum? All of the teachers thought they had access to a complete N.W.T. School Health Curriculum while, in fact, the checklist demonstrated that a complete curriculum was not available in any of the 6 schools that were studied. Many of the teachers did have a copy of a section of the curriculum specific to the grade they taught. They saw this as

being beneficial, but even that section of the curriculum was often incomplete.

4. How many teachers use parts, or all of the N.W.T. School Health Curriculum? The majority of the teachers interviewed reported that they used parts or all of the curriculum and none of the teachers reported that they did not use any of the curriculum.

5. What are the reasons for using parts and not the entire curriculum? This question had many responses including: takes too much time; not in French for the French Immersion program; and either too simple or not seen as appropriate for the students. Other reasons can be suggested even though they were not reported by the teachers for example, not teaching a unit because the teacher was not comfortable with the topic, lacking support for teaching a new and/or difficult topic, and not having the entire curriculum easily accessible.

6. What are the barriers to implementation? The barriers that were reported by the teachers and principals were many. The main barrier could be lumped under the heading of insufficient inservice, orientation and ongoing support. Other items

identified as barriers to implementation were: time allotment, poor distribution process, lack of translation in French, lack of a N.W.T. Health Resource Catalogue.

7. What special arrangements are being made, or have been made for teachers and principals to ensure implementation of the curriculum? In fact, little had been carried out to ensure that implementation had occurred.

8. What strategies would enhance implementation? Many ways can be suggested to promote implementation but most would require additional resources, both financial and human. As well, knowledge of the implementation process and a commitment to the curriculum are important. Specific recommendations are listed under the heading of Recommendations for Enhancing Implementation later in this chapter.

The following conclusions are based on the interview responses and the curriculum checklist as they relate to factors that affect implementation [Fullan, 1982].

1. The majority of teachers recognized the need for health to be taught in schools.

2. Teachers and administrators believed students were receptive to health education.

3. As seen by teachers and principals, most community members were not interested in the teaching of health.

4. Some teachers felt that teaching health made little difference to students' lives.

5. The majority of teachers were not aware of the numbers of hours per week that the Department of Education had designated for the teaching health.

6. The curriculum was seen to be teacher friendly, easy to use, and not time consuming or complex.

7. A complete curriculum was not readily available in any of the schools even though the teachers felt that they had easy access to a complete curriculum.

8. Not everyone had access to, or had read the introduction to the curriculum.

9. The majority of the teachers used at least part of the curriculum.

10. The teachers had access to and made use of some resource people.

11. Teachers used additional resource materials but they found that these materials were not always easily accessible, nor always adequate. As well, there was no health resource centre catalogue.

12. The strategies, materials, and topics in the curriculum were, for the most part, seen by the teachers and principals to be worthwhile.

13. Some parts of the curriculum, namely the junior high grades needed revision.

14. Few teachers had been involved in the developing of the curriculum.

15. Teachers were well qualified and experienced for the most part, but few had a science or health background.

16. Few formal mechanisms existed to foster trust, support, and communication between teachers and to increase resocialization which is important in the process of acquiring new skills.

17. Teachers informally supported other teachers in the teaching of health.

18. There had been little or no orientation, inservice, and ongoing support for the teachers and principals with regards to the health curriculum.

19. Few meetings were held to discuss health.

20. Few principals had a science background, but were otherwise well qualified and experienced.

21. Principals generally had positive attitudes towards the teaching of health in their schools, and were comfortable with teachers teaching health.

22. Principals did not recognize the importance of the principal's role in implementation.

23. Principals were not generally involved in the implementation of the health program.

24. No ongoing systematic collection of data had been used to identify problems in implementation, therefore problems had not been addressed.

25. Few students were prevented by the parents from attending the school health classes.

Recommendations for Enhancing Implementation

By applying Fullan's 15 factors for enhancing the implementation process to the above conclusions, the

following recommendations, if applied, could improve the implementation of the N.W.T. School Health Curriculum.

1. Issue a complete bound copy of the health curriculum, K to 9, to each school which should be kept in an area accessible to all staff.

2. Ensure that each teacher had their own copy of the grade that they teach, as well as the introduction section to the curriculum.

3. Integrate the alcohol and other drug unit in the general health curriculum.

4. Revise the curriculum for grades 7, 8, 9.

5. Assign a senior teacher in each school to health so that other teachers could use this person as a resource.

6. Make arrangements for a yearly orientation to the health curriculum for all new teachers.

7. Provide principals and teachers with inservice and ongoing support.

8. Ensure more formal mechanisms are in place to increase resocialization of teachers in gaining new skills in teaching health.

9. Ensure formal meetings are held in each

school to discuss health.

10. Employ health consultants for each school board to provide resource support for teachers and principals.

11. Give preference to those who have health and science qualifications when hiring consultants, principals, and teachers.

12. Employ a high profile individual to head up the health program so that the momentum for school health is maintained, e.g. health consultant in the Department of Education.

13. Make more audio visual aides available in the school to provide easier access to appropriate materials.

14. Develop videos on how to teach sensitive issues like child abuse, AIDS education, spousal assault, alcoholism.

15. Prepare and distribute to all teachers and principals a G.N.W.T. Health Resource Centre catalogue.

16. Distribute another letter from the Department of Education to all boards, principals, and teachers with regards to: the number of hours health is to be

taught each week; health is to be a mandatory subject in all schools; all concepts in the N.W.T. School Health Curriculum are to be covered in each school.

17. Ensure that special attention be given to all the junior high teachers' needs in the way of additional courses, inservice, and ongoing support.

18. Undertake to provide more emphasis and support on drug and alcohol topics.

19. Provide assistance to the french immersion programs with french translations of the curriculum and resource materials.

20. Ensure that teachers, principals, consultants, boards, and the Department of Education personnel, recognize that implementation is a slow process which will take many years to implement the N.W.T. School Health Curriculum.

21. Provide principals with inservice so that they are made more aware of their important role in implementation.

22. Ensure by ongoing support and inservice that teachers are made to feel that teaching health does in fact make a difference.

23. Carry out a comprehensive study after 5

years, to assess the effectiveness of the N.W.T. School Health Curriculum, including the implementation process.

Recommendations for Comprehensive Evaluation

This preliminary study was not intended to produce definitive answers but rather to raise questions that may be applied in carrying out a more comprehensive evaluation of the N.W.T. School Health Curriculum. It is recommended that the following be considered when a comprehensive evaluation is undertaken.

1. The inclusion of a larger number of schools from a wide geographic area across the N.W.T..

2. The inclusion of students, parents, board members, school superintendents as well as principals and teachers, in the interview and questionnaire process.

3. The use of other methods for data collection in addition to interviews and questionnaires, for example, observing in the classroom, surveying students' health notebooks, examining health marks

and/or comments from student report cards, inspecting students' records from the inception of the N.W.T. School Health Curriculum, and collecting data from minutes of teachers' meetings.

4. A survey of the resource materials that actually are available in each school including the N.W.T. School Health Curriculum binders plus materials in teachers possession.

5. An evaluation of the knowledge, attitudes and behaviours of students be undertaken when it has been established that the implementation of the N.W.T. School Health Curriculum has occurred at a satisfactory level.

6. A comparison be undertaken of the data from 5 above and the data from the original study [1987] relating to knowledge, attitudes and behaviours.

REFERENCES

1. Airhihenbuwa, C., & Pineiro, O. (1988). Cross-cultural health education; a pedagogical challenge. Journal of School Health, 58 (6), 240-242.

2. Aslin, N. & DeArman, W. (1976). Adoption and abandonment of innovative practices in high schools. Education Leadership, 33, (5), 601-606.

3. Basch, C. (1984). Research on disseminating and implementing health education programs in schools. Health Education, 15 (4), 57-66.

4. Basch, C., Gold, R. (1985). The validity of reliability assessments. Journal of School Health, 55 (5), 191-195.

5. Basch, C., Sliepcevich, E., Gold, R., Duncan, D., & Kolbe, L. (1985). Avoiding Type III error in health education program evaluations: a case study. Health Education Quarterly, 12 (4), 315-331.

6. Berman, P., McLaughlin, M. (1976). Implementation of educational innovation. Education Forum, XL (3), 347-370.

7. Charters, W., & Jones, J. (1973). On the risk of appraising non-events in program evaluation. Educational Researcher, 2(11), 5-7.

8. Connell, D., & Turner, R. (1985). The impact of instructional experience and the effects of cumulative instruction. Journal of School Health, 55 (8), 324-331.

9. Connell, D., Turner, R., & Mason, E. (1985). Summary of findings of school health education evaluation: health promotion effectiveness, implementation, and cost. Journal of School Health, 55 (8), 316-321.

10. Cook, T., & Walberg, H. (1985). Methodological and substantive significance. Journal of School Health, 55 (8), 340-342.

11. Crowther, F. (1972). Factors affecting the rate of adoption of the 1971 Alberta social studies curriculum for elementary schools. Unpublished master's thesis, University of Alberta.

12. Davis, R., Gonser, M., Kirkpatrick, M., Lavery, S., & Owen, S. (1985). Comprehensive school health education: a practical definition. Journal of School Health, 55 (8), 335-339.

13. Downey, L. & Associates. (1975). The social studies in Alberta - 1975. Edmonton: L. Downey Research Associates.

14. Fitz-Gibbon, C., & Morris, L. (1987). How to design a program evaluation. (2nd. ed.). California: Sage Publications, Inc.

15. Fors, S. & Doster, M. (1985). Implication of results: factors for success. Journal of School Health, 55 (8), 332-334.

16. Fullan, M. (1982). The meaning of educational change. Toronto: OISE Press.

17. Fullan, M. (1983). Evaluating program implementation: what can be learned from follow through. Curriculum Inquiry, 13 (2), 215-227.

18. Fullan, M. (1985). Change processes and strategies at the local level. Elementary School Health Journal, 85 (3), 391-421.

19. Fullan, M., & Park, P. (1981). Curriculum implementation, a resource booklet. Toronto: Ontario Ministry of Education.

20. Fullan, M., & Pomfret, A. (1977). Research on curriculum and instruction implementation. Review of Educational Research, 47 (1), 335-397.

21. Glatthorn, A. (1987). Curriculum leadership. Illinois, U.S.A.: Scott, Foresman and Company.

22. Goodlad, J., Klein, M., and Associates. (1970). Behind the classroom door. Worthington, Ohio: Charles Jones.

23. Green, L., Cook, T., Doster, M., Fors, S., Hambleton, R., Smith, A., & Walberg, H. (1985). Thoughts from the School Health Educational Advisory Panel. Journal of School Health, 55 (8), 300.

24. Hall, G., & Loucks, S. (1977). A developmental model for determining whether the treatment is actually implemented. American Educational Research Journal, 14 (3), 263-276.

25. Hardy, O. (1983). A design for school division implementation of provincial curriculum. Unpublished master's thesis, University of Manitoba.

26. Harvey, D., Fried, S., McCutcheon, V. and Fry, M. Analysis Patient Visits, N.W.T. for 12 months ending July, 1984. School Health Project, Department of Health, G.N.W.T. Evaluation Report No.5 November, 1984.

27. Herman, J., Morris, L., & Fitz-Gibbon, C. (1987). Evaluator's Handbook (2nd. ed.). California: Sage Publications, Inc.

28. Hill, J. (1986). Curriculum evaluation for school improvement. Illinois. U.S.A.: Charles C. Thomas.

29. Killip, D., Lovick, S., Goldman, L., & Allensworth, D. (1987). Integrated school and community programs. Journal of School Health, 57 (10), 437-444.

30. King, M., Morris, L., & Fitz-Gibbon, C. (1987). How to assess program implementation (2nd. ed.). California: Sage Publications, Inc.

31. Kirst, M., and Meister, G. (1985). Turbulence in American secondary schools: what reforms last? Curriculum Inquiry, 15 (2), 169-186.

32. Kolbe, L., & Iverson, D. (1981). Implementing comprehensive health education: educational innovations and social change. Health Education Quarterly, 8 (1), 57-78.

33. Leary, J. (1985). The effectiveness of concerns based implementation: case study of the implementation of the K-6 Manitoba Provincial Science Curriculum in Berens River School at the Frontier School Division No. 48. Unpublished master's thesis, University of Manitoba.

34. Leithwood, K. (Ed.). (1982). Studies in curriculum decision making. Toronto, Ontario: OISE Press.

35. Leithwood, K. (Ed). (1986). Planned educational change - a manual of curriculum review, development, and implementation (CRDI) concepts and procedures. Toronto: OISE Press.

36. Leithwood, K., & Montgomery, D. (1982). A framework for planned education change: application to the assessment of program implementation. Educational Evaluation and Policy Analysis, 4 (2), 157-167.

37. Leithwood, K., & Montgomery, D. (Eds.). (1987). Improving classroom practice using innovative profiles. Toronto: OISE Press.

38. Lohrmann, D., Gold, R., & Jubb, W. (1987). School health education: a foundation for school health programs. Journal of School Health, 57 (10), 420-424.

39. Lohrmann, D., & Zimmerli, W. (1987). Advocating for school health in New York. Journal of School Health, 57 (2), 68-71.

40. Loucks-Horsley, S., & Hergert, L. (1985). An action guide to school improvement. VA: Association for Supervision and Curriculum Development and Network Inc.

41. Loucks, S., & Pratt, H. (1979). The buck stops here. Educational Leadership, 37 (3), 212-215.

42. McLaren, J. (1987). Dimensions of behavior of the school principal in an elementary school curriculum implementation. Unpublished doctoral thesis, University of Manitoba.

43. Orpwood, G. (1985). Toward the renewal of Canadian science education. 1. deliberate inquiry model. Canadian Science Education, 69 (4), 477-489.

44. Owen, S., Kirkpatrick, M., Lavery, S., Gonser, H., Nelson, S., Davis, R., Mason, E., & Connell, D. (1985). Selecting and recruiting health programs for the school health education evaluation. Journal of School Health, 55 (8), 305-308.

45. Parcel, G. (1984). Theoretical models for application in school health education research. Journal of School Health, 54 (6), 39-49.

46. Parcel, G., Simons-Morton, B., O'Hara, N., Baranowski, T., & Wilson, B. (1989). School promotion of healthful diet and physical activity: impact on learning outcomes and self reported behavior. Health Education Quarterly, 16 (2), 181-199.

47. Patton, M. (1986). Utilization-focused evaluation (2nd. ed.). Beverly Hills, U.S.A.: Sage Publications.

48. Pine, P. (1985). Promoting health education in schools - problems and solutions. Arlington, Va.: American Association of School Administrators.

49. Popham, W. (1988). Educational evaluation. New Jersey: Prentice Hall.

50. Pruitt, B. (1985). Comments from the field. Journal of School Health, 55 (8), 351-353.

51. Rubin, R., Stuck, G. and Revicki, D. (1980). A model for assessing the degree of implementation in field-based educational programs. Paper presented at the American Educational Research Association Annual Meeting.

52. Scanlon, J., & Nay, J., et al. (1977). Avoiding type III and IV errors. In G. Gilbert & P. Conklin (Eds.). Evaluation management: a source book. Charlottesville, Va: US Civil Service Commission.

53. Showers, B. (1984). Peer coaching: a strategy for facilitating transfer of training. Eugene, Oregon: Center for Educational Policy and Management.

54. Tanner, T., & tanner, L. (1980). Curriculum development - theory into practice (2nd. ed.). N.Y., N.Y.: MacMillan Pub. Co., Inc.

55. Tricker, R., & Davis, L. (1988). Implementing drug education in schools: an analysis of the costs and teacher perceptions. Journal of School Health, 58 (5), 181-185.

56. Tuckman, B. (1979). Evaluating instructional programs. Boston: Allyn and Bacon, Inc.

57. Willcox, D. (1988). Implications of the Holmes Report for Health Education. Journal of School Health, 58 (5), 190-192.

58. Wong, K. (1985). Curriculum implementation in Manitoba: literature review. Winnipeg: Department of Education, Manitoba Government.

59. Zimmerli, W. (1981). Organizing for school health education programs at the local level. Health Education Quarterly, 8 (1), 39-42.

Northwest Territories Canada

LEGISLATIVE ASSEMBLY OF THE NORTHWEST TERRITORIES

9th Session

10th Assembly

HANSARD
Official Report

DAY 36

THURSDAY, JUNE 4, 1987

Pages 1557 to 1604

Speaker: The Honourable Donald M. Stewart, M.L.A.

MS BENTIVEGNA: Thank you, Mr. Chairman. Just to point out to the committee that in subsecti 8(3), the operator would know that there was going to be an application made because he has alrea refused the director entry into the premises where in the previous subsection it is stated th there can be inspections. So this was the case where the operator refuses to allow the direct into the facility, so therefore, he already knows that there is going to be an inspection. If was an ex parte application, I think as the Minister has pointed out, then there would be danger the child because then there would have to be service and therefore there would be a delay. But cover the concern that the operator might not know, he has already refused entry -- and this is all reasonable times -- and it was also done through the court process to protect people's homes so there would not be entry by the director without a court order.

CHAIRMAN (Mr. Wah-Shee): Thank you. Clause 8, duty to inspect. Agreed?

SOME HON. MEMBERS: Agreed.

---Agreed

CHAIRMAN (Mr. Wah-Shee): With that we will take a 15 minute coffee break and when we return w will deal with the statement on AIDS.

---SHORT RECESS

Minister's Statement 57-87(1), AIDS

We are dealing with the Minister's Statement 57-87(1), on AIDS. Mr. McLaughlin.

HON. BRUCE McLAUGHLIN: Thank you very much, Mr. Chairman. I appreciate the motion that was mad by the caucus chairman, Mr. Richard, to bring this issue into the committee of the whole.

Last night the briefing that was given to Members of the Assembly was, I guess, impressive enoug to them on how important a public health concern the disease AIDS is in North America, Canada an the Northwest Territories, that the program that we are about to implement to prevent the spread o this disease in the Northwest Territories is considered by Members to be important enough that th briefing should occur in the committee of the whole so that media and the general public can b aware of how important this Legislative Assembly feels the issue of preventing the spread of th disease AIDS is.

Mr. Chairman, just a few brief comments. Some Members may be aware from listening to the media lately that this is a disease that is growing in numbers. An international conference on AIDS is being held in New York. Some of the most startling highlights that have come out of that are that in the United States of America it is estimated that it is possible that one out of every 30 males is infected with the virus; that although the largest number of cases are still amongst the homosexual and intravenous drug-using community, it is now a fact that the fastest growing number of cases that has been reported are amongst the general heterosexual community. So this is a public health matter that affects everybody. The reason behind the program that we are putting in place, is to move this from just being an issue of interest to people, or just being a general health issue, to turn this into a situation for residents of the Northwest Territories where it becomes a personal disease prevention issue, so that individual people in the Northwest Territories will be in a position where they understand how important it is that they protect themselves, their relatives, their friends and their sexual partners in the prevention of this disease. So primarily what we want to do is make this a disease prevention program that will be personally understood and personally implemented by all residents of the Northwest Territories.

With that, Mr. Chairman, I would like to ask in the two witnesses: from the Department of Health, the epidemiologist, Dr. Luis Barreto; and from Health and Welfare Canada, Dr. David Kinloch, the regional medical officer. Thank you very much, Mr. Chairman.

CHAIRMAN (Mr. Wah-Shee): Thank you. Does the committee agree?

SOME HON. MEMBERS: Agreed.

---Agreed

CHAIRMAN (Mr. Wah-Shee): Thank you. Dr. Barreto.

Dr. Barreto's Presentation

DR. BARRETO: Mr. Speaker, honourable Ministers and Members of the Legislative Assembly. At the outset, on behalf of the AIDS co-ordinating committee, I would like to thank you for the opportunity to address you on this extremely important public health issue which has major social, legal and financial implications for all the departments across the government. For some Members in the House whom we addressed last night, some of this material is going to be repetitious, but we do hope it will reinforce the message that we have been trying to provide.

AIDS is a new disease for North America. It has only been around for the last seven or eight years. It has been around in Africa for longer periods than that. Over 36,000 cases of AIDS have been reported in the United States; half of them are dead. About 1015 as of May 25th have been reported in Canada, over half of them are dead as well. A large number of people in the States as well as in Canada, and Dr. Kinloch will run through some of those numbers with you as well, are infected and given the time, most of these will develop AIDS and most of these will die as well. There is no vaccine so far, there is no satisfactory treatment, except perhaps for a ray of hope which is offered by a new drug for treatment of a pneumonia which is usually seen in people with AIDS. The only vaccine that they have so far is awareness and education of the public.

AIDS has recently been declared by a Commissioner's Order as a communicable disease under the Public Health Act, thus including it in the schedule of communicable diseases list. Regulations for reporting of screening results are being worked upon right now. As well, I should tell you that the AIDS co-ordinating committee, in the last period of about a year, has already put in place policies for ensuring that all the blood in the Territories used for transfusion, as well as all the emergency blood donors, are screened for the AIDS virus. Based on current knowledge, however, there is need to put this whole program in top gear. This is because, until very recently, we all felt that only five to 15 per cent of those people who had the virus on the test as positive, would go on to develop the disease. But today we know, based on follow-up of the last eight years, that given the time, almost all of them will go on to develop the disease and almost all of them in a period of two or three years, after developing the disease, will die.

A public health strategy for education of all people in the Territories, in every language and dialect possible, has been developed. Working closely with the Departments of Justice, Communication and Education, a public health strategy has been prepared and will be put in place shortly. This address to this group and to our leaders today, is in fact one of those exercises in educating our leaders with regard to different aspects of AIDS. Dr. Kinloch will now run through some of the important aspects of the disease, focusing on the testing for AIDS and I hope that at the end of this presentation, really, we will be able to show you that condoms are not the final answer. In fact they could provide us with a sense of security which might be, in fact, not correct, especially in inexperienced hands. The answers we hope will also show that screening for everybody is not ideal. Having said that as a briefing on what has happened, I would like to ask Dr. Kinloch to proceed with his presentation.

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

Dr. Kinloch's Presentation

DR. KINLOCH: Mr. Speaker, honourable Members. I shall be speaking from a four-page handout which has been distributed to you and is available to people sitting in the back. The first page is headed "A Schematic View of AIDS".

Exposure

Exposure to the AIDS virus occurs under a very limited number of circumstances. The AIDS virus is fragile; it does not live outside of human cells for very long. AIDS virus cannot be transmitted except by blood and by semen. The virus is found in other tissues; it is found in breast milk; it is found in saliva and tears but there are no authenticated cases of it having been transmitted by other than blood and by semen. Casual contact with someone who is infected with AIDS is not sufficient to transmit the virus. Only intimate contact, usually sexual contact, will transmit the virus. The virus is ordinarily not transmitted from a single exposure but it can be and there are documented cases of individuals who have had only one exposure to the virus. It was sufficient to infect them and ultimately to cause their deaths.

Infection

Infection occurs when the AIDS virus enters your body, enters the blood. Once the AIDS virus has entered, it takes over the apparatus of the cell in order to reproduce itself. A person, once infected with AIDS, is infected for life. During the period of infection the person can transmit the virus to others, even though he or she may appear perfectly well. During the initial stage of infection there may be no evidence whatever that infection has occurred. There may be no associated illness. The person may have a sexual encounter with an infected person, become infected, suffer no apparent ill effects and yet the virus has entered that person's body; it is growing there and it now may be transmitted into others with whom that person now has sexual contact.

Antibody Appears In Blood

After a period of anywhere from several weeks to six or more months after the virus has entered the body, the blood of that individual develops substances called antibodies which permit us to determine that the person is infected, but there is a fairly long period, up to months, when the individual is infected and there is no evidence of that infection so that the blood could be tested during that period and no antibody would be found.

This is a particularly dangerous situation because during this period, when the person is infected but the blood tests are negative, disease can be transmitted. Blood can be donated which contains the virus, which could be passed to others. So it is not sufficient, for example, that the Red Cross relies on blood testing alone to protect the blood supply. They also caution people who may be infected not to donate blood. You will note that in today's Globe and Mail, a letter from the acting national director of the Red Cross blood services pointed out that individuals who have certain risk factors should not donate blood because we cannot rely upon the test to detect whether the blood is safe. Those risk factors include "sexual contact by a male with another male, even once, at any time since 1977; sharing a needle to inject drugs; regular treatment with blood products; sexual contact with someone other than your usual partner, particularly with a prostitute, in areas where AIDS cases are known to occur, such as some major North American cities, central Africa and Haiti" and finally, "sexual contact with anyone who has any of the risk factors described above." Those individuals should not donate blood even if they have had a blood test which was negative because they could be incubating the virus. The individual during this incubation period is a risk to those around them. Some people do not develop the antibody even after the normal period of many months and those people will remain a risk for the rest of their lives.

Screening For AIDS

There has been a great deal of discussion and a great deal of debate and many pronouncements on the need for screening for the disease AIDS and some have advocated that everyone should be tested. But virtually every public health agency in the world opposes such a proposal. The opposition is based on several grounds. First, for the reason I have described in relation to the incubation period, the period after infection during which no antibody is present. So the test describes the current situation at the time when blood is taken. It cannot exclude the presence of infection. The second reason is that when the current tests are applied to groups in which the prevalance of disease is very low, that is, there are relatively small numbers of people who actually have the disease, then the test becomes inaccurate. The tests for AIDS are very sensitive. They operate at levels of efficiency of 99 per cent or more. But the small departure from perfection when applied to large numbers of individuals can produce a sufficient number of false positive results to do far more damage than society can accept.

So the recommendations for testing are limited to those individuals who fit into any of the risk groups, the ones that I have listed in relation to blood donors. There, among those groups, where the prevalence of infection, the numbers of people who are infected as a per cent of the total number of people in that group, is sufficiently high that the test results are accurate at a high enough level that we should perform those tests.

Development Of AIDS Disease

It takes many years for actual AIDS disease to occur after infection. There are very few individuals who develop AIDS disease prior to two years after infection. Infection, again, is when the AIDS virus enters your body. AIDS disease occurs when symptoms and signs develop, when the

individual becomes ill. The illness usually begins subtly but it can appear suddenly. It can resemble other diseases. But it has one characteristic and that is it interferes with the body's ability to protect itself from infection, so that most of the manifestations of AIDS disease are those of infection.

As the months go by and we observe the experience of groups of people who have become infected with AIDS, it is becoming apparent, as Dr. Barreto indicated, that it is not just a small proportion of infected people who go on to develop the disease. It appears to be a fairly stable seven to 10 per cent per year who go on to disease and there are some researchers who now suggest, on the basis of following infected people over an extended period of time, that virtually everyone who is infected will ultimately go on to develop AIDS.

AIDS disease is a terrible, terrible disease. Repeated infections which respond slowly, if at all, to usual treatments have a very disabling effect on individuals and many suffer horribly and virtually all of them will die. The figures that we have from the US and from Canada, indicate that 50 per cent of individuals who have diagnosed AIDS will be dead within two years. Our current drug treatment will delay but not necessarily prevent death. There is no real treatment for the disease and a vaccine is a long way off. The only prescription we can offer for the protection of the public is "Don't get infected."

Distribution Of AIDS In Canada By Risk Category

Let us move now to the second page of the handout, headed "Distribution of AIDS in Canada by risk category to the 25th May, 1987". You will note the risk category is made up of homosexual and bisexual males, intravenous drug abusers, blood product recipients, from an endemic area which has come to mean Haiti or central Africa, heterosexual partners and others. In Canada about 84 per cent of all of our reported cases are among homosexuals and bisexual males; very few drug abusers, although this category is a major contributor to cases in the United States. Nearly 17 per cent of cases in the United States are among intravenous drug abusers, a matter of great concern to the Surgeon General of the United States, who believes that the intravenous drug abuser will be the primary route through which disease transmission moves, from a pattern of male to male, to male to female, and female to male. At that point the progress, the movement of the disease through the population, could intensify. At the moment in Canada we have only 26 reported cases among individuals who are heterosexual partners of individuals infected with the AIDS virus. However, as Mr. McLaughlin has indicated, that group is among the most rapidly increasing in the United States. The numbers are still small but they are increasing more rapidly than other groups. There are a small number of children infected who have AIDS, most of them as a result of contact with a parent at risk, frequently through transmission of the virus during or shortly after pregnancy. The total number then is 1034.

The previous report issued some three weeks earlier was of 1001 cases, indicating an average rate of new disease reported of about 10 cases a week. In the United States a year ago, 26 new cases of AIDS were reported each day to the centres for disease control. This year at the same time, 38 cases per day are being reported.

Estimated Number Of Persons Infected With AIDS

Let us turn now to the third page, and from a discussion of AIDS cases to AIDS infected persons. This table sets out the estimates for the numbers of people who are infected with AIDS. They do not have AIDS disease, but they are infected with the virus in the United States, in Canada and in the Northwest Territories, based upon numbers which were developed in the United States. You will frequently have heard the estimate of 1.7 million infected Americans, well, that is where the numbers come from. A proportion of infected individuals have been applied to each group to produce that sum. The estimate for Canada is based on rates one half that of the US because Canada is behind the United States on the epidemic curve. The number of disease cases is rising rapidly, we are roughly two years behind the United States on that curve. The number of estimated infected individuals in the Northwest Territories is based upon half the rate for Canada, because we are about the same distance here behind Canada on that epidemic curve.

Thus we have an estimate for Canada of just under 100,000 infected individuals and just under 100 infected individuals in the Northwest Territories. To date, we have only a single reported case of AIDS in the Northwest Territories but there are obviously other individuals who are infected, whether it is 88, 48 or 128 we do not know. We can only estimate based on the experience of others.

Still, it raises the very important point that it is not sufficient to look at the number of infected or the number of AIDS cases, because there are many, many more who are infected for each case. Ultimately, most of those infected individuals will go on to the disease. The number of disease cases which are going to be reported in the United States and Canada and the Northwest Territories in 1991 are already determined. Those individuals are now infected and progressing toward the disease at an inexorable rate of seven to 10 per cent per year, so that we can confidently, if somewhat fearfully, contemplate a significant number of infected individuals in 1991 in the orders of magnitude above what we are saying now.

Estimated Risk Of Infection

One of the prescriptions which we have heard in advertising from the South as a means of avoiding infection and of stemming this horrible epidemic is use of the condom. That is true to an extent but only partially true. Condoms have been used for a long time as a contraceptive measure and they have never been fully effective and there is no reason to believe that they will be fully effective in slowing or stemming the spread of AIDS either. Even when used correctly and consistently with a spermicide, condoms have a failure rate of at least five per cent per year. However, in practice the failure rate is probably closer to 15 per cent per year. So, you will see on page four of that handout, the estimated risk of infection for sexual partners of AIDS positive contacts based on condom use at varying levels of efficacy -- if you move across the row of 85 per cent efficacy for the condom, you will see the failure rate of 15 per cent in one year and it becomes a failure rate of 38.6 per cent in three years and a failure rate of 55.6 per cent in five years. Those are not particularly reassuring figures. But those are, in fact, the sort of protection that one can expect from condoms. So, it is not sufficient to continue on as we are and rely solely upon the condom to protect us from infection. That will not work. It is necessary that behaviour patterns change as well.

Behaviour Patterns And Risk Of Infection

We can describe patterns of behaviour that carry no risk of AIDS infection or a very slight risk of AIDS infection and we can also identify practices that place individuals at grave risk of infection. At the highest level of hazard is the unprotected, homosexual encounter with a stranger in a large southern city. In many southern cities in Canada the homosexual population is infected at the rate of about 50 to 75 per cent. So, that one chance encounter may be sufficient. Encounters with prostitutes are also a risk but at a lower level. Indeed, of the 100 prostitutes in Vancouver who have been tested over the past few months, none of them were found to be infected but that does not hold in other cities in Canada and it certainly does not hold in other cities of the world. The principal risk to the Territories arises from the possible importation of AIDS virus by bisexual males or males consorting with prostitutes in the South and bringing the disease back to the Territories.

It is necessary for us to find the collection of activities which will first inform individuals as to the risk that they may expect from AIDS and to provide them with the information they need to protect themselves and others. Part of that process must include establishing a confidential and pure environment in which people who believe they are infected, because they belong to one of these risk groups, can come forward for testing and end the horrible fear they have that they are infected.

Blood Tests

At the time of testing, blood would be taken only after an individual had been counselled regarding what the test can do and what it cannot do; counselled regarding the implications of a positive or a negative test result; and after the individual has signed a consent form for the taking of the blood sample. Blood samples will be submitted to laboratories in the South under code names or numbers so that only the individual tested and the nurse or physician who draws the blood need know that this individual is being tested for AIDS. When the report comes back it will be returned to the individual who drew the blood sample, again in code, and the individual will be called to hear the result of the test and to learn its implications.

The implications are: If a negative test, you are negative at the time the blood test was taken. If you have had recent high risk sexual contact within the past year, then your test may subsequently turn positive and I would invite you to return for a further blood test in six months. If it is negative at that point and you have not had a high risk encounter in the interim

-- between the tests -- then you are probably safe as long as you avoid high risk situations. If the test is positive, the message is much more difficult to transmit because we must inform the individual that they are infected with the virus which we believe goes on to the disease in a very high proportion of cases and at the moment we have no treatment. But we can provide information that would permit that individual to protect others around them.

We propose to deal with AIDS in the same manner we deal with other dangerous infectious diseases -- through contact tracing and counselling with the aim of preventing its further spread in the communities. The message to the public is a short one: "Avoid becoming infected", and we will offer very specific information as to how that might be accomplished. It includes the use of condoms but it cannot rely exclusively on them.

High Rate Of Sexually Transmitted Diseases In NWT

One piece of information regarding the Northwest Territories, specifically, causes us concern regarding the possibility for the spread of AIDS and that is our very high rate of sexually transmitted diseases. In the past year we have had over 2000 cases of sexually transmitted disease reported to us. That is four per cent of the whole population and among individuals between the ages of 15 and 30, it is over 10 per cent. In some communities, it is over 20 per cent.

Thus, we have a situation in which the AIDS virus, once introduced into a community and entering heterosexual transmission, from male to female or female to male, could spread very rapidly. Hence, the urgency and the importance of putting together the pieces of a program that will equip the public to protect themselves.

CHAIRMAN (Mr. Erkloo): Any questions or comments from the Members? Mr. Butters.

HON. TOM BUTTERS: Thank you, Mr. Chairman. I thank our witnesses for their very informative talk. I would like to query Dr. Kinloch on his use of the words "false positive" in relation to the testing. Now I had thought that testing would be an answer or a solution to our problem; you could do tests and identify individuals who had either acquired the virus or had moved on to the AIDS phase. What is a "false positive"? Why do the tests produce so many false positives? And does that mean that a person then could be designated as having the virus and then in truth, not have it? Is that what a "false positive" means in this case?

CHAIRMAN (Mr. Erkloo): Dr. Kinloch.

Accuracy And Value Of Blood Tests

DR. KINLOCH: That is correct. As I indicated, the tests are very sensitive but they are not perfect. And a less than one per cent failure or inaccuracy rate would seem unimportant except when it is applied to a population of a million or 100,000 in which case the actual numbers of false positives become high enough that they outweigh the benefits of carrying out the tests if the test is restricted to those individuals who are at risk. In other words, where the likelihood of finding disease is fairly high, the test is extraordinarily accurate. But it is when we move from those high risk categories into the general population that the difficulty arises.

So our recommendation is that we must avoid carrying out tests on individuals who are at low risk because it is possible, simply through speaking with individuals, to identify whether they are likely to be infected or not. It is far better to do that than to conduct a test. In other words, if you have not had a homosexual encounter since 1977; if you have not used intravenous drugs; if you have not received massive blood transfusions; if you have not consorted with prostitutes in major southern cities or in South America, then it is most unlikely that you are infected. And having a negative blood test is not going to make me, as a physician, feel any more comfortable that you are not.

CHAIRMAN (Mr. Erkloo): Thank you. Mr. Wray.

Confidentiality In Small Communities

MR. GORDON WRAY: Thank you, Mr. Chairman. Two questions that keep coming up in the communities time and time again when people ask about AIDS. The first, and it is not so much a question as it is a statement is that, I guess, for those of us from the small communities, it is sort of taken

for granted that in a small community it is very hard to keep a secret. When you say to people, "Well, you know, you should go to the nursing station to get tested", people say, "Well, what is the point? Because if we have got it, everybody in town is going to know about it." So there is a great reluctance to go to the local nursing station because local people work there and the nurses are part of the community. I guess there is a feeling that the information is going to get out. So there is a fair amount of nervousness about it. I just wonder if you care to comment on that one point because obviously, as you say, we have the highest rate of sexually transmitted diseases in the country. So, I probably would be right in saying that it is in some of the smaller communities that the really high percentages come in. So, I think that they are a particularly vulnerable group of people.

And secondly, the other question, and even reading the material I am not quite sure myself, how long do we stay infected? You know, there are some people who say to me, "Well, it was years ago when I was last fooling around; I do not have it or I would have got it by now." Is that true? Or does the virus stay in the blood even if you got the virus say, 15 years ago? Is it possible for the virus to stay in the blood that long and no sign of infection or illness show whatsoever? I guess those are my two questions.

CHAIRMAN (Mr. Erkloo): Dr. Kinloch.

DR. KINLOCH: The issue of confidentiality and of the willingness of people who believe themselves to be at risk to come forward for testing is critical to the success of our efforts to control the movement of AIDS into the smaller communities. That can be assisted if the general public, those who are not infected, at no risk, understand that these individuals who may be infected are of no specific risk to them, that they need not be feared nor shunned nor discriminated against.

Fear Of Discrimination Through Ignorance

It is largely the fear of those who are at risk that such discrimination will take place that keeps them from coming foward. I have spoken with individuals who have explained those fears and provided examples of discrimination that have resulted in the loss of jobs and the loss of homes and becoming a social leper. Much of the discriminatory action lies in ignorance. People do not understand that casual contact cannot transmit the disease. So one of the major aims of our program is to make sure that everybody understands that they cannot get AIDS even from someone who has the disease by shaking their hand or living in the same house or sharing cutlery. The disease does not spread that way. It spreads by sexual contact.

We have been following people infected with AIDS now for only about eight years but it is fairly clear that at eight years, most people who are infected show evidence of that infection. Certainly, anyone who has been infected will show evidence in a blood test within a year of having been infected except for that small proportion of individuals who do not develop antibodies at all.

I think that many people's minds can be put to rest with a few simple facts about the disease and we are preparing to provide that information in every language of the Territories because unless we can deal with the general concerns and the major misconceptions that exist about the disease, we are not going to be able to even approach those folks who really need help, those people at high risk.

CHAIRMAN (Mr. Erkloo): Thank you. Ms Cournoyea.

MS COURNOYEA: Yes, Mr. Chairman. Dr. Kinloch made a statement that we should often be very careful about statistics and certainly I fully agree with that. And in his statement that there were four per cent or approximately 2000 cases of sexually transmitted disease in a given year, could he clarify whether those were individual cases by individual people or were they recurring cases that he is talking about?

CHAIRMAN (Mr. Erkloo): Dr. Kinloch.

DR. KINLOCH: The reports made to us are of occurrence, not necessarily of individuals, and we can break out our figures by individuals as well. It represents probably in the order of three per cent of individuals, if we were to look at it in that manner.

CHAIRMAN (Mr. Erkloo): Ms Cournoyea.

MS COURNOYEA: Mr. Chairman, on Dr. Kinloch's statement that he would not recommend that everyone get tested and as some of my other colleagues have stated, there are not very many things in smaller communities that are secret or unknown. It is just the make-up of the communities, how when one person says one thing to another individual in confidence, it generally magnifies itself. I believe a lot of people would be concerned about that. Given your statement that perhaps there is about 85 per cent accuracy in testing and given that there would be quite an extended educational process that would tell people that the testing is only about 85 per cent accurate, would an educational program to people explaining that not alleviate some of the fears of people who may come up with a positive/negative? Because it would certainly be known to people that there would be that 15 or 20 per cent chance that the testing would not be highly accurate when they were tested, and in any community, if that is the case, you would still have the 15 or 20 per cent margin. Would that not alleviate some of the anxieties and disturbances of people who did get a positive/negative or negative/positive result?

CHAIRMAN (Mr. Erkloo): Dr. Kinloch.

DR. KINLOCH: I believe that the best approach to dealing with this problem is to attempt to convince individuals that we are far better able to exclude them as at risk of AIDS through obtaining information about their behaviour than by carrying out a blood test. Only after we have questioned the individuals about their contact and found that they belong to a risk group, would the test be undertaken, at which time we could have some confidence in the results of the test. The dangers of having individuals labelled incorrectly as infected, are too horrible to contemplate. Even if the numbers of false positives are very small, they are far better avoided than making the attempt to clean up the mess after the fact. What I am describing to you now is based on our current technology. It is possible in the future that we will have a perfect test, but we do not have any other perfect tests and I do not expect that we are going to develop one for AIDS either.

CHAIRMAN (Mr. Erkloo): Dr. Barreto.

Pre-Test And Post-Test Counselling

DR. BARRETO: Thank you, Mr. Chairman. Just to address the same question which was asked. Testing, whenever it is offered, will in fact be preceded by pre-test counselling to in fact ensure what Dr. Kinloch has just said, that the person involved is in a high risk group and that he or she needs the test. Following the results of the test, post-test counselling will also be done to ensure that those who are in high risk groups and perhaps may be negative are tested again and people who may not be at high risk and are found to be positive are tested again if need be, and the implications of the results are explained properly to the people because of all the social, legal, insurance and other ramifications that the test results may have.

CHAIRMAN (Mr. Erkloo): Thank you. Mr. Patterson.

HON. DENNIS PATTERSON: Thank you, Mr. Chairman. First of all I would like to say that I very much welcome this opportunity to discuss this critical problem in public at the Legislative Assembly. I would like to just mention, if I may, Mr. Chairman, that as Minister of Education I am profoundly concerned about this issue and the need to educate our young people who, I think we have good reason to believe, are sexually quite active. I know that in the Baffin Region last year, 34 per cent of the live births were to young women under the age of 18. Some very young. I think that is one small indicator of the degree of sexual activity amongst young people.

Compulsory Component Of School Curriculum

So I would like to let this Assembly know that I have, along with Mr. McLaughlin, recently taken steps to see that the family life education part of the health curriculum, which has been under careful development for the past several years and which at our direction will include a unit on AIDS as well as on other sexually transmitted diseases, shall be compulsory in the curriculum in all schools in the Northwest Territories this fall. I would like to make it clear to Members of the Legislative Assembly that I have taken this step, with the support of the Executive Council, because I believe that no one should have the option of living in ignorance about this potentially dangerous epidemic disease. And I believe that we owe it to our young people to give them the information, the facts on which to make personal decisions about their personal conduct. I should point out, because I know that this matter of sex education may well be controversial, that a

parent may have the right to withdraw a child from such classes should there be personal or philosophical grounds for doing so. But the instruction will be given to all children unless their parents individually object and withdraw them from the class. I seek support from the Members of the Assembly in making this work in light of this problem.

My first question, and perhaps this is to Dr. Barreto as chairman of the AIDS committee, I think education is critical and I am wondering, will community councils, band councils, concerned groups in communities, regional councils, local education authorities be able to get briefings of this kind in the coming year as part of your education program?

CHAIRMAN (Mr. Erkloo): Thank you. Dr. Barreto.

Public Education Strategy

DR. BARRETO: Thank you, Mr. Chairman. The whole public affairs strategy envisages that in fact from now on we will educate every possible person around us. We have started with the leaders here and we hope to take it at the regional level, at the hamlet council level and at the community level. We hope to have a full-time co-ordinator for the program, who in fact will be responsible for educating people in each region, to have resource people in each region and eventually in communities. We have already made a start on this. Dr. Kinloch and myself and some of the members have addressed regional health boards in the Baffin, the regional health board in Keewatin already. We have also had an opportunity already to address the workshop of all health committees in Baffin.

So that has been a start. This message that we hope to carry on very quickly will be conveyed to all members across the Territories, all the native organizations and political organizations.

CHAIRMAN (Mr. Erkloo): Thank you. Mr. Patterson.

Condoms Only 75 Per Cent Reliable To Prevent AIDS

HON. DENNIS PATTERSON: Yes, thank you, Mr. Chairman. If I may, I have one more question. Mr. Chairman, I am somewhat concerned about the information about the unreliability of condoms. I think generally many people feel, and the ads from southern Canada have sort of led us to believe, that this is the answer. Condoms will prevent AIDS. But I see from the information here that over a period of use of some years, condoms might be reliable only something like 75 per cent of the time.

This really concerns me because you have already told us that we have a much higher degree of sexual activity in the North and that in some communities, if I am correct, one out of every five people contracted VD in a year. This is very alarming. If we are going to have a difficult time slowing people's activity down and encouraging people to have fewer partners and condoms are not reliable, then we are still very vulnerable.

The question I want to ask is, is not part of the problem with condoms that people do not use them properly and do not know how to use them properly? My question then would be, first of all, are condoms available or will they be made available free in the Northwest Territories in the smallest communities which may have these problems as much as bigger centres? And secondly, are there ways in which condoms can be used so as to be more reliable than, say, 75 per cent and will you be providing information about careful use of condoms so as to improve their reliability? Thank you.

CHAIRMAN (Mr. Erkloo): Dr. Kinloch.

DR. KINLOCH: Condoms are available have been available from nursing stations across the Territories for many years. We have recently inquired about the use of condoms and the numbers that are distributed and have recommended that all nursing stations ensure that they have adequate supplies, and furthermore, that individuals to whom condoms are dispensed understand how to use them correctly. It is pointless to distribute condoms if they are not going to be used correctly.

We are also investigating the relative merits of specific types of condoms. They are not equally good. The general category of condoms that we recommend is a latex condom with spermicide. They are already coated with spermicide because we believe that that is probably the only circumstance under which spermicide would be used. When we have satisfied ourselves that one particular brand or another has the highest reliability level, then we will recommend that that condom be used. The current condoms which are dispensed are latex but they do not have spermicide.

HON. DENNIS PATTERSON: Are they free?

DR. KINLOCH: They are free.

CHAIRMAN (Mr. Erkloo): Thank you. Mr. Curley.

MR. CURLEY: Thank you, Mr. Chairman. I would like to compliment the two doctors here today making this very important presentation. I think in the Northwest Territories, forums are much more limited to the ones that are taking place down south. Not a day goes by down south where you do not read through various forums, whether it be a magazine or health journal or other programs that are being conducted to inform the public about this terrible disease which I think is posing a moral dilemma to every individual in the world that is aware of the risk of this particular disease. I think it is a moral responsibility of each one of us to try to ensure that ourselves and our children are fully aware of the danger of this thing.

Problems In Providing Public Information In Northwest Territories

Having said that, Mr. Chairman, I would like to ask the two doctors, I certainly appreciate the strategy that they are taking today, but we still have limited forums for providing public information in the Northwest Territories. What we have heard so far in the public media in the Northwest Territories is not adequate. The kinds of things that I have seen on TV commercials related to the thing are certainly not adequate. I also see that in the Northwest Territories it is going to be difficult to get the message across with the kind of impact that we like to see, because many of our people, particularly in the small communities and isolated regions, normally do not have the ability to read and fully understand what is being printed in various information packages. So I would like to ask the doctors, how are you going to provide this information which you said will be produced in every language in the Northwest Territories? Will it be through the media, through the TV, through the newspapers or will this be a specific journal developed to try to get the message across? I think it is important to understand a bit about that because not many of us ordinary lay people are qualified really to try to get the message across and to try to inform our immediate relatives, or whatnot, and personal friends about the danger of AIDS in this country. Thank you.

CHAIRMAN (Mr. Erkloo): Dr. Barreto.

DR. BARRETO: That is an excellent point, Mr. Chairman. The attempt will be a multi-media approach utilizing every possible resource available in the Territories. It will be posters, pamphlets, newspapers, but more importantly than that, there is a group which does not read these very regularly. And specifically directed for them, there will be a video which we are hoping to produce which will be directed much more at conditions in the North.

We have already made some preliminary inquiries, budgeting, etc., for this and we hope to get working on this very shortly. The whole public health strategy has, in fact, been drawn up with the department of Culture and Communications working closely with the AIDS co-ordinating committee. Tapes especially for the Dene languages are being developed, and if you see today in the packages that we have given you, we have the English versions of the fact sheets A, B and C, telling you the different aspects of AIDS and what is being done in the Territories. It has already been translated into various Inuit dialects. It has been translated into at least three Dene languages. The reason I did not provide the House today with this information was because we have not back-translated it as yet. That is what we are doing.

A tape in Loucheux has already been produced. That has to be checked again and that is why I did not give you a copy today. But it will be available. The radio will be an important media to be utilized, as well as television.

CHAIRMAN (Mr. Wah-Shee): Thank you. Ms Cournoyea.

MS COURNOYEA: Thank you, Mr. Chairman. I have a three part question, I suppose. The obvious question that generally circulates in a community at the beginning of any kind of concern such as this is, in the Northwest Territories, are there really positively any confirmed cases in the Northwest Territories? I realize that we have been told that if, you know, the percentages as it relates to what happened in the United States and what happened in southern Canada, it would be more than likely that there will be certain assumptions you could make about the Northwest

Territories. But I am not really asking you to make an assumption on the basis of what happened in other places but are there any confirmed cases in the Northwest Territories? As well, if a person is interested and may not even be knowledgeable of who may or may not be a dangerous partner, are there any obvious symptoms that would be known to a person if they had an advanced stage of AIDS?

CHAIRMAN (Mr. Wah-Shee): Thank you. Dr. Barreto or Dr. Kinloch.

Confirmed Cases Of AIDS In Territories

DR. KINLOCH: We have reported one case of AIDS in the Territories. The projection would have suggested there are two. That case has been followed up, contacts have been traced and we have concluded that there is no need to proceed further. We have heard from the individuals in Quebec who previously reported on a hypothetical situation affecting an Inuit who was behaving irresponsibly with AIDS and infecting others. And there was no truth to that particular assertion. The case was used as an example of the dilemmas that the disease produces for those who care for individuals with the disease. The case in northern Quebec apparently has not had contacts in the Northwest Territories, but if there had been contacts, they would have been followed up. In the early stages of disease or, more importantly, in the early stages after infection, even before the appearance of a positive blood test, the individual who is infected may appear perfectly well and may appear perfectly well for periods of several years after infection, so that it is not sufficient to wait until the appearance of disease. And rather, if individuals believe that their partner is infected or may be behaving in such a manner as to become infected, then they should deal with their concern directly and not wait. After the sexual partner has developed signs of AIDS, it is far too late. The partner by then would usually be infected.

CHAIRMAN (Mr. Wah-Shee): Ms Cournoyea.

MS COURNOYEA: Further, Mr. Chairman, to the case in the Northwest Territories. Is that person still living in the Northwest Territories? And further, if a parent had a child who, say, over the last eight years had received several blood transfusions, would you recommend that parent to have the child checked even at that young age?

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

DR. KINLOCH: The infected individual, the individual with AIDS, is still in the Northwest Territories.

The recommendation regarding individuals who have received blood transfusions over the past several years is that unless there are unusual circumstances, such as massive blood transfusions, then testing is not recommended.

CHAIRMAN (Mr. Wah-Shee): Mr. Erkloo.

MR. ERKLOO: (Translation) Thank you, Mr. Chairman. How dangerous is the AIDS issue? I was not aware of it until last night and today, and only what I have learned from the doctors. I would like to thank the good doctors as well as the Minister of Health for making it known. I believe that this issue should be stressed throughout the NWT and I think it would be their duty to let the NWT people know about the dangers of infection from AIDS.

I have heard the number of VD cases in the NWT. In the small communities, it is very great. Compared to Canadian statistics there are more VD cases in the NWT -- four per cent more than the rest of Canada. And before the age of 18 there are quite a few cases of 35 per cent of young people getting venereal disease. Today young women are more in danger who have never had children -- 18 or 19 years of age, they usually have children by the time they are of that age. I am not trying to say that you are not a very good person, but we have to realize that it is a reality today. That is the case as it is in the NWT and it would be spread very quickly since there are so many people that have sexual relations.

I have two questions. First, venereal disease at this time is prevalent. We are quite aware of it. If I contracted VD then it would be obvious that I have it. People would know in the NWT. I would like to ask, when a person has acquired AIDS, how would he know about it, or another person who does not have AIDS?

Another question I have is that in smaller communities where there are no doctors and medical services, laboratories are not available, how could I get tested for AIDS?

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

Symptoms Of AIDS

DR. KINLOCH: For much of the period during which people are capable of transmitting the virus of AIDS to other people, there are no signs and no symptoms. The disease can begin slowly with fevers and weight loss and prolonged diarrhea, infections going on to a severe infection which will make that individual sick enough that he must be treated in a hospital. Or the disease may begin very rapidly with a severe infection, or an unusual form of skin cancer can develop, which produces purplish blotches on the skin or inside the mouth. At that stage the individual is very ill and the course from that point on is usually progressively downhill. The period to which we should place most of our attention is on the period prior to the disease appearing and, even more important, prior to the point at which individuals become infected, because that is the only point at which we can intervene.

AIDS Tests

AIDS testing will be available to everybody in the Territories. AIDS tests can be done in nursing stations. The blood sample can be taken after an individual has been counselled and after a consent form has been obtained and the blood test will be sent out to the South. There is no need for us to attempt to do that testing here in the Territories.

The information on the tests will be provided back to the individual by people who understand what they mean. It is important that anybody having the test understand the implications, understand the limitations of the test, understand what a negative test means and what a positive test means.

The most important information an individual who believes he or she is at risk can receive is that they are not infected because it gives them the chance then to protect themselves from infection in the future. For people who have not had a high risk exposure, they can continue to protect themselves by avoiding the conditions under which they could become infected by the AIDS virus and we will make those conditions very, very specific at the risk of, perhaps, offending some people with the directness of our message. But it is important that people understand precisely the circumstances that might produce infection.

The confidentiality of these tests is the most important feature of the program because if we cannot protect confidentiality to the extent where people will have confidence in us, then people who fear that they may be infected will not come forward. They will have to live with the fear that they are infected and with the possibility that they may infect others.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. Erkloo.

MR. ERKLOO: (Translation) Thank you, Mr. Chairman. My question is going to be directed to the Minister, but I am not too sure -- I remember in the early 1960s we made a book called the Q Book in Ottawa and at the time, the venereal diseases were not well-known among Inuit. When we made information available about the venereal diseases, the smaller communities were just making fun of the information provided because they were not well-informed but afterwards it was not made fun of. AIDS is more serious because you can die from it.

Testing For AIDS

I have heard the United States president has made it mandatory for the inmates to be tested. Have there been any ideas similar to this? If this disease were to be found in the NWT, would it be made mandatory also in the NWT by the Minister? I am not suggesting today, but if we had to do that in the future, would we do it?

CHAIRMAN (Mr. Wah-Shee): Mr. Minister.

HON. BRUCE McLAUGHLIN: Thank you, Mr. Chairman. I do not think that I, nor the officials who work for Mr. Epp, nor officials who work in my department can overemphasize how serious this disease is and that it is important that we have a program in place so that everybody in the Northwest

Territories understands how serious this disease may be for their individual communities. So, are not going to rely on any single means of communication. We are going to use written a audio-visual means of communication to fight this disease and the spread of this disease. addition to that, we intend to actually make live presentations on this disease in every communi in the Northwest Territories. It is our intention that we will approach community leaders and ma them aware of how important this is, to make sure that when the public health teams visit t communities to discuss this disease, proper arrangements be made so that all residents of t communities will become involved in the education and informational programs.

As for the testing of individuals, Dr. Kinloch has outlined what the limitations are of testi everybody, but any group of people who are at high risk, and I am aware that in some correctiona systems consideration is being given to the testing of prisoners who may be at risk or may b causing risk to other prisoners, and in the Northwest Territories people who are in situations li that will be counselled to be taking tests.

At this time no mandatory testing is contemplated. The Members should realize, though, that unde the Public Health Act there is a wide ranging amount of power at the discretion of the Ministe responsible, and his officials, to make sure that disease is controlled and that if there ar situations where people are knowingly not following advice, as in the case of tuberculosis or an other disease, measures can be taken to discipline or control those people in order to prevent th spread of the disease. Thank you, Mr. Chairman.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. Butters.

False Results From AIDS Tests

HON. TOM BUTTERS: Thank you, Mr. Chairman. Once again on the testing. As I understand it, person who is carrying the AIDS virus could be tested through your system through a doctor or nurse, could have that test carried out in Edmonton, and the result could be that he does not hav AIDS, that the test would be negative even though he was carrying the virus. On the other hand, a individual who did not have the virus could be tested and get a report back that he does hav AIDS. Is that correct?

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

DR. KINLOCH: Mr. Chairman, yes, the test is not perfect. It is less likely to miss someone who really does have AIDS than it is to falsely indicate that someone is infected. The likelihood of that happening increases as you move from testing groups at high risk to groups at low risk.

CHAIRMAN (Mr. Wah-Shee): Thank you. Dr. Barreto.

DR. BARRETO: Mr. Chairman, just to supplement that comment by Dr. Kinloch. I just want to add that the test does not tell you whether you have AIDS or whether you do not have AIDS. The test only tells you whether you have been infected in the past or not infected in the past. The diagnosis of AIDS is made at a later date once those tests are positive and certain symptoms develop, the ones that Dr. Kinloch described earlier.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. Richard.

Presentation On AIDS A Revelation

MR. RICHARD: Thank you, Mr. Chairman. I want to add my appreciation to the doctors for providing this briefing for us today and last night, as well. Also, my appreciation to Hon. Bruce McLaughlin for arranging for this briefing. The presentation last evening was quite a revelation to myself. I believe that I try to keep fairly current on issues like this but by just reading the conventional media sources, I was actually quite shocked last night on a number of factors that the two doctors presented to us that, in my view, are not there in the general mass media. Primarily what struck me was the inaccuracy of these tests, as accurate as they are, these 99 per cent rates that were described to us but the inaccurate results that can result from testing the entire population.

On the one hand, the figures that you gave us again today which extrapolate, or whatever the term is, take the percentage of high risk groups from the United States population and the southern Canadian population to our population, it appears that there may be 80 to 100 residents who

actually have the virus in their system. That is shocking enough. But, as I understood you to say, if the current tests were given to the entire population of the Northwest Territories of some 50,000 people, there may be as many as four, or five, or six hundred people who will test positive but who do not, in fact, have the virus.

That to me is something that I had never envisaged in all the material I read or heard in the mass media. It confirms to me what the doctors have been saying, Mr. Chairman, that that is a very good reason why, at this point in the technology that is developed, it is very difficult to advocate any kind of mandatory testing to the general population as opposed to high risk groups. That was quite a revelation to me personally.

The other particular item, I suppose, was the information that was provided to us, and again today, on the relative unreliability of the use of condoms. Because I believe the message coming across the television, and they have only started those ads in recent months, the message coming across is that you are reasonably safe if you use condoms and the doctors have convinced me, last night and today, that that is not the message that should be coming across the television to the Canadian people.

I believe, Mr. Chairman, that our government is going to be taking the steps necessary in terms of public education. For the record, I hope later today, just to confirm that, to move a motion in support of the government conducting such a program and to allocate whatever money is necessary to do that.

Professional Counsellors Important

But I also am pleased to hear the doctors say, Mr. Chairman, that it is also important that we have professional counsellors to deal with people who come forward and want to take the test and that they are not going to let just anybody administer the test nor say "Yes, you can have the test." They are going to do some counselling so that the individuals who take the test are aware of what the test will provide them with. And because of the inaccurate results that may be presented, as the doctors have stated, we need people who have compassion to work with those whose test results are positive. I was also pleased to hear, Mr. Chairman, that these two doctors, working with officials in our government, particularly in the Department of Communications and the interpreter corps, have done so much already to get the message out in all languages.

So, Mr. Chairman, I would like at the end of the discussion today to make a motion just for the record. I do not think anyone will disagree with it, but just so we do go on record as supporting the education program. For myself, I personally am going to make a point of contacting the community leaders in my community, such as the city council and the school boards, and I am going to urge them to get this briefing from these two doctors or their colleagues. I would urge other MLAs to do that in each of their communities to ensure that this briefing is given to all the community leaders in the Northwest Territories. Thank you.

CHAIRMAN (Mr. Wah-Shee): Thank you. Any further comments? Ms Cournoyea.

Time Needed To Educate People

MS COURNOYEA: Mr. Chairman, I certainly agree that it is going to take some time to educate people and to bring the message across to apprize people just how critical a situation this new virus can create for their community if people are not aware and are not cautioned or do not know how they can limit the spread of this virus. However, given that in the past it seems that drastic action had to be taken even in tuberculosis, where almost everyone got vaccinated, and smallpox, where something was found, and hopefully with this there will be something that will come up that would probably be 100 per cent. But in the case that with this educational process going on and the fact that we have 50,000 people in the Northwest Territories, and given the statistics that you have quoted and rapid escalation once the disease gets within any community, at what percentage would you suggest that the Northwest Territories create an emergency situation in dealing with this problem?

CHAIRMAN (Mr. Wah-Shee): Thank you. Dr. Kinloch.

DR. KINLOCH: I think it is important that we should avoid accepting or creating an emergency situation because that tends to bring out some unfortunate characteristics in human behaviour that are characterized as a plague mentality. We see some evidence of plague mentality in some of the

excesses in the South in relation to the handling of a demonstration by gays in Washington, DC, for example, where the police force wore long yellow rubber gloves in dealing with the demonstrators. That is ignorance in action, but I am afraid it tends to be encouraged by a feeling that one is dealing with an emergency situation or an emergency is declared. We are going to deal with this virus by ensuring that everybody knows how it is spread and how they can protect themselves. We know more about this particular virus and how it spreads and how to deal with it than about virtually any other disease.

Difficulty Is In Changing Conduct

The difficulty is that it is going to require a change in the way we conduct ourselves in a very sensitive part of our lives. That is the difficulty. The prescription is simple, but following through on the prescription is not. What we must avoid is leaving people with the misconception that they can prevent AIDS from spreading simply by using condoms or by being tested periodically.

There is no simple solution. It is going to require some insight, some understanding and some action. It is not enough that people receive the message and understand it and can restate it. They have to act on it. I think we will have a good indicator of whether people are acting upon it in the Northwest Territories by a reduction of our sexually transmitted disease rates. If our disease rates a year from now are the same as they are today, we are in trouble. The message is simple. Do not get infected. We can provide very explicit information about how to avoid becoming infected. We must now carry that information into every region, into every community in such a way that people will accept and act upon it.

CHAIRMAN (Mr. Wah-Shee): Thank you. Any further comments? Mr. Pudluk.

HON. LUDY PUDLUK: (Translation) Thank you, Mr. Chairman. I would just like to express my appreciation for the people who gave this briefing and for making it very clear. I would like to thank you very much because you have just taught me a lot that I did not know before.

We know that we are going to see increasing incidence in the communities of this disease because of the transportation technology, the way it is. You can go a long way in one day or even in just two hours. We are not sure how we would deal with it or how we would stop it but we know that we can expect to see more cases in the future of people with AIDS. According to the notes that you have, they have very clear information on May 14, 1987, written at that time. It was some time ago that it was written, but we have not seen it until today, and how well they are put together. So, I think that we should save a copy of this letter and start distributing it to the communities. I think that will be the best thing to do. We know that through TV, radio and meetings the people are going to be informed of the disease but we have to start passing on the information and knowledge that we have gained and I think that will be the best route to go.

Time Factor In Shipping Blood Sample

Also, I have a question. You said earlier that if a person is sent to a laboratory for a blood test, that has to be done down south. Some of the communities, especially the smaller communities, only get sporadic plane service. Some of them only receive one flight a week. For example, Grise Fiord. So, the blood sample is going to take a long time to get to the laboratory down south. Is there any time factor involved here, whether a blood sample that was taken so much time ago would not be able to reveal the disease in that person? Thank you.

CHAIRMAN (Mr. Wah-Shee): Dr. Barreto.

DR. BARRETO: Thank you, Mr. Chairman. The answer to the question is, no. It will not matter, if the blood is kept in a refrigerator for a week and then transported to the laboratory. It should not make any difference whatsoever.

Bisexual Group An Important Link

I do want to emphasize the first comment that was made, Mr. Chairman, and that is that travel between the Territories and the South is easily available to a lot of people and it is that group that is of concern; namely the group that is bisexual. Besides the homosexual group that we have spoken about, the bisexual group is an important link between the homosexual community and the heterosexual community. It is the closet bisexual, who leads a perfectly normal relationship with

his wife or with his partner while in the Territories, has a homosexual relationship when he is down south and comes back. He is the kind of person who can get infected down south and transmit it to his wife, to his partner or his other contacts back in the North. It was a very important point that was raised. But hopefully, when this educational material becomes available, that message will get across.

The reason why this is the first time you have seen this material was because this material was in the hands of translators. I appreciate the excellent work and the assistance we have had from all the translators in the departments here. The Inuktitut translations, as I said, are finished and the Dene translations are in progress right now. As soon as this whole package is completed, it will be distributed wherever we can do so.

CHAIRMAN (Mr. Wah-Shee): Thank you. Any further comments? Mr. MacQuarrie.

MR. MacQUARRIE: Thank you. I have a question for the Minister of Education. Essentially, the first question is very simple. At what age will the education program begin in the schools? And the second question is -- I will wait for a moment until he gets the answer to the first question.

CHAIRMAN (Mr. Wah-Shee): Mr. Minister.

HON. DENNIS PATTERSON: Yes, thank you, Mr. Chairman. The family life education program is from kindergarten to grade nine and from grades 10 to 12. We use an Alberta program of family life education. I am told that for the issue of AIDS in the family life program, we will begin to tell children about it at the grade three level. Thank you.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. MacQuarrie.

Orientation For Teachers Of Family Life Education

MR. MacQUARRIE: The second question is with respect to the AIDS component in the family life education program. What orientation will there be for the teachers? I can see in all of this that if there is one thing worse than a lack of information, and that would be very serious for our population, it would be a profusion of misinformation. That is precisely what could happen if the department were simply to rely on some written materials that it sends to schools. I taught in schools for 22 years and I wish I could say that everything that came into the schools was read diligently by teachers, so that when they went into the classroom they knew precisely what they were going to be teaching. But I have to confess that is not the case. Therefore, will there be an orientation for all teachers who will be dealing with it? Will they be assisted by medical personnel in this particular area?

CHAIRMAN (Mr. Wah-Shee): Mr. Minister.

HON. DENNIS PATTERSON: Yes, thank you, Mr. Chairman. I would like to explain that on this whole thing, we have been working very closely with the Department of Health, with medical professionals and education experts. I think it is fair to say that the program that has been developed is sensitive to the special circumstances of the North and is quite effective and seems to be quite impressive, partly because it has been under development for several years.

Now to answer the Member's question, Mr. Chairman. we are planning teacher orientation beginning early this fall. The orientation will be conducted by Education and Health personnel. The way we are going to do it is to rely on our regional staff to provide the orientation to every teacher and we are going to ensure that regional staff are given proper training as to how to orientate each teacher. In addition, teachers will be encouraged to work with local health professionals in each community to provide back-up at the community level. Thank you, Mr. Chairman.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. MacQuarrie.

Plain Talk In Education Program

MR. MacQUARRIE: I heard a radio interview at one point, I believe with Dr. Kinloch, and at that time he said in their approach generally, to education for the public at large, that plain talk would be the characteristic of the education program. Can I ask the Minister of Education whether plain talk is going to be a major feature of the education program in the schools as well, so that there is no misunderstanding of what is being taught?

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. Minister.

HON. DENNIS PATTERSON: Yes, Mr. Chairman, I think that is what I meant when I said that I believe that the family life curriculum is suited to the North. I think we have set it up in such a way that the whole family life program deals with plain facts, plain talk. In particular I can assure the Member that the AIDS component is going to be specific, straightforward, factual, clear. Thank you.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. MacQuarrie.

MR. MacQUARRIE: One question for the doctors. I can understand very clearly why any temptation to compel testing is unwise. You have cited a number of reasons and I think they are cogent reasons and we ought to keep them in mind. However, it is not clear to me -- some individual, even though that individual was not from a high risk group, but let us say an individual who perhaps had two or three heterosexual contacts and had a concern of not knowing what the practices of those other contacts were, is going to establish a new relationship, or is coming back to be with his wife, and is trying to be socially responsible. It is not that they want the test to know, themselves, whether they have got it or not because in a sense that is not much good anyway. If you have got it, you have got it and you will find out soon enough I guess, but they would like to know so as not to endanger someone else. They want to be socially responsible and do not want to endanger potential contacts. In cases like that it seems that you still recommend against testing. I am wondering why. Is it expensive, is it time-consuming, or what is it that makes you recommend against it in those cases? Presumably these would be individuals who recognize that there are false positives and that in fact they may be designated, who are willing to say, "Okay, if that is the case, abstention for a year or something and we will find out where we are at." But why not in those cases?

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

Example For Not Testing

DR. KINLOCH: Mr. Chairman, the advice regarding the avoidance of testing in other than high risk cases is one to which we would not be slavishly dedicated. There are circumstances which might suggest to the physician or nurse that an individual might properly be tested. But only after very careful discussion with the patient regarding the nature of the exposures and the basis for the concern and with that information in hand would it be possible to judge whether you might be convinced by either a positive or negative test in a manner other than what you might judge from what you have been told. If you conclude from your discussion with the patient that if the test comes back positive you are not going to believe it, then there is not much point doing the test. It is a judgment call in some circumstances. But as a general rule, at this point, individuals who report that they have had several heterosexual contacts in the Northwest Territories over the last X months, in the absence or in the presence of a sexually transmitted disease, would not constitute a reasonable basis for an AIDS test. There may be exceptions but as a general rule, not.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. Richard.

Counselling Instruction For Nurses In Communities

MR. RICHARD: Just a quick question. I was going to ask the Minister of Health or perhaps one of the good doctors, in the same context as Mr. MacQuarrie's questions about the instructions that will be given to teachers, what about the nursing stations in the communities? The delivery of health services in most of the communities is by nurses and in the context of Dr. Kinloch's description of how important it is for the counselling aspect prior to a test, what is going to be done to educate the nurses in the nursing stations throughout the Territories about that important aspect of counselling? Is there a program in place for that now?

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

DR. KINLOCH: Mr. Chairman, yes, we have had an educational campaign under way now for over a year, beginning with attempts to provide an information base for nursing supervisors and nursing directors and a follow-up of written material to individual nursing stations. We intend to maintain a very close relationship with individual nursing stations on the subject of AIDS until we are satisfied that the information that we are providing has been fully appreciated and understood at the community level.

Each new nurse who comes on staff will be provided with this background information in preparation for any situation she might have to deal with in the community but I expect that for some time the reaction of a nurse in the community to someone presenting themselves as a high risk individual seeking testing will be to immediately get in touch with us in Yellowknife for advice and guidance as to how to handle the situation. That is not unreasonable, given the relative infrequency of these sorts of situations at this point. We hope that the infrequency remains.

CHAIRMAN (Mr. Wah-Shee): Thank you. Ms Cournoyea.

Motion To Extend Sitting Hours, Carried

MS COURNOYEA: Mr. Chairman, may I make a motion to extend this sitting until this topic has been concluded?

CHAIRMAN (Mr. Wah-Shee): A motion is on the floor to extend the sitting so that we can complete this particular topic. All those in favour? Opposed, if any?

SOME HON. MEMBERS: Agreed.

---Carried

CHAIRMAN (Mr. Wah-Shee): The sitting is extended. Mrs. Lawrence.

MRS. LAWRENCE: Mahsi cho. Thank you. I would just like to thank these two doctors for giving us the proper information. Many times we see so many different ads on TV, in the papers, you do not know which direction you are going or whether you should believe the papers or the TV or whatever. I think it is such a scary disease, you know; there is no cure for it. It is so important that I think we really immediately should educate the young people. Our young people are involved in more activities than we expected. When we do educate these people, I think it should also be translated into all the aboriginal languages for the communities, for the band council, for different programs in the community that are already existing. They can use that. It can be done as a video tape or anything that could be translated easily. Once again, I just want to say thank you. Mahsi cho.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. T'Seleie.

Communities Respond To Leaders

MR. T'SELEIE: Mr. Chairman, I just want to make a brief comment. Some of what I have heard yesterday and today is new to me. I think for quite a few other people it is probably new. We hear this and that on the radio, on the TV and that kind of thing but it never really sinks in so I think it is a good idea for the government, if that is what they plan to do, to start an information campaign to make people aware of it. The way I hear the doctors' message, at least to me it is loud and clear, that people need to be aware and they need, themselves, to take action on the prevention of this disease. It is my experience that when you begin to have the leadership in any community get behind an issue that most of the time it works out. The people in the community respond to their leadership. I think on this one, the population in the communities can respond. I think the information campaign has to encompass the other transmittable diseases as well, and it has to include, I think, the whole problem of teenage pregnancies. It has to somehow address all of that. So those are my general comments.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. McCallum.

MR. McCALLUM: Thank you, Mr. Chairman. I just have one question of either of the doctors. You indicate in your handout that recipients of blood and blood products are one of the high risk areas. But you anticipate that this will eventually or fairly quickly be removed as a high risk area. Is that because of the advances in being able to better determine it in the blood donors? Not just with people who are possible risks giving blood, but in terms of better analysis, etc. Is that what you are talking about?

CHAIRMAN (Mr. Wah-Shee): Dr. Barreto.

Screening Of Red Cross Blood Donations

DR. BARRETO: Mr. Chairman, as of November, 1985 every unit of blood that is donated through the Red Cross is screened and rescreened and rechecked for possibilities of the virus. All those wherein even the slightest doubt exists, are disregarded, so that there is only perhaps an extremely remote chance that a unit of blood which has been sent into the Territories from any part is, in fact, contaminated with the virus. For all practical purposes we can say that anybody who has been transfused with any blood which has come from the Red Cross after November, 1985, has virtually no risk at all. However, there is a small risk for people who have had massive amounts of transfusions, and I am talking of at least 20 to 30 units of blood, which were obtained before November, 1985. People who have had large doses of transfusions, and more specifically mothers or women who have had large doses of blood which I have talked about and who are contemplating getting pregnant, might be advised to have the test done. For the rest, it is not advised because of the false positives that we spoke about.

Hemophiliacs Found To Be Positive

There is yet another group which is important for the Territories and those are the hemophiliacs. There are children in the Territories who have been receiving blood or blood products, usually blood products; factor eight, factor nine. These are made from blood. For those who have had this before November, 1985, the story is not very encouraging. Fifty to 60 per cent in the United States of children who have been given these products are today found to be positive. This group is encouraged to have their children checked because the results are almost similar in Canada and could well be the same in the Territories. That is basically the story with regard to transfusions and blood products.

CHAIRMAN (Mr. Wah-Shee): Thank you. Mr. McCallum.

MR. McCALLUM: Thank you, Mr. Chairman. I do not know that I could add anything to what has been said. I do want to indicate my support of what is going on with the department, in determining support services of counselling and everything else, for people that have it, and specifically I would guess, for parents of children who have contacted it. It must be very traumatic for a parent to find that by blood transfusion or the use of blood products, their child has contacted AIDS. I would expect that it is traumatic regardless, when one has any kind of disease that is a fatal disease and a matter of time, Lou Gehrig's disease, for example, leukemia, or any other one; that is very difficult to accept.

So, I would hope that we are able to get people who would be able to really counsel people into an acceptance of what is going to happen because there is a need and there is no cure as it is now. It is not as it was back 25 or 30, maybe 40 years ago, with sexually transmitted diseases, relatively simple if one were to contact it. A quick trip to a doctor and it was fine. In this instance though you cannot wait because there is no vaccine in sight. Those of us who have been around for a while know what it was like to finally get a polio vaccine, those of us who have had relatives or friends who contacted it years ago and know what went on then.

False Sense Of Security

To be lulled into a sense of security that, it is like any other disease that has come along and hit mankind over the years, that somebody will get a vaccine for it, is not good enough. The same thing with the use of condoms, as some other Members have indicated. This is the answer to it all and do not worry about anything, this is going to work, is not just a false sense of security and safety but even more so, maybe a feeling or a sense of increased sexual activity. I am personally pleased at the idea that the message will be going out that you cannot be lulled into security or a feeling of safety because, first, the vaccine does not seem to be appearing and, second, the use of contraceptives, in this case condoms, does not give anyone any kind of security. So I would encourage the department and the government and I appreciate the comments of both doctors in that. Again, I do not know that I can say very much more. I certainly appreciate the opportunity to have heard such direct testimony here today from both doctors.

CHAIRMAN (Mr. Wah-Shee): Thank you. Any further general comments? Dr. Barreto.

Compassion And Understanding Extremely Important

DR. BARRETO: Just a comment, Mr. Chairman, on what has been just raised. It is extremely important not only to depend on professional counselling services. Compassion I think is an extremely important word in this whole issue. It is very easy to label people as AIDS positive on test or as AIDS patients and treat them like lepers, segregate them, differentiate them at work and other places and in homes. So compassion, therefore, and a proper understanding of the problem I think are extremely important for all of us to show to people who are in fact positive, who are diseased with AIDS, because it is not easy to know that you have a disease and you are likely to die before too long, whether it be cancer or anything else, but this has major connotations to it and therefore compassion is extremely important.

CHAIRMAN (Mr. Wah-Shee): Mr. Richard. Mr. T'Seleie.

MR. T'SELEIE: Mr. Chairman, just a short question for the doctors. I have read, regarding the cost to the medical system of the spread of AIDS in Canada, that eventually there will be large costs to the medical system and I wonder if for our sakes whether you could comment on that so that it will help to sink in that the early stages of prevention are probably the best thing and it is good to spend resources at this stage rather than to wait for 10 years or whatever.

CHAIRMAN (Mr. Wah-Shee): Dr. Kinloch.

DR. KINLOCH: The costs of AIDS are difficult to comprehend because they encompass costs across all of society. It is not just the direct medical costs and lost wages and pain and suffering. It is the misery that is inflicted across a large segment of people who are friends, relatives and associates of those who are ill and the real danger is a destruction of community life as significant numbers of a community become infected and go on to the disease and die. That is the real cost. If there ever was a case to be made for prevention, this is it, and if you leave with only one message it is the one we have been repeating this afternoon and that is, "Don't get infected. Know how not to get infected."

CHAIRMAN (Mr. Wah-Shee): Thank you. Any further comments? Mr. Richard.

Motion To Recommend That Extensive Public Education Program On AIDS Be Conducted, Carried

MR. RICHARD: Thank you, Mr. Chairman, I would like then, before we close, to move a motion so that the committee will be on record. Mr. Chairman, whereas this committee is concerned with the epidemic of the AIDS disease; and whereas the people in the Northwest Territories still have an opportunity to prevent the spread of this disease in the Northwest Territories; I move that the Legislative Assembly recommend to the Executive Council that it take all steps necessary, including the allocation of whatever financial resources are necessary, to conduct an extensive public education program about AIDS in all communities at the earliest possible opportunity; and in particular, that full and frank briefings be given to each regional or tribal council, each band council, each community council, each education authority and wherever possible, every community leader.

CHAIRMAN (Mr. Wah-Shee): Thank you. Could I have a copy of that motion, please? Mr. Richard, your motion is in order. To the motion.

AN HON. MEMBER: Question.

CHAIRMAN (Mr. Wah-Shee): Question has been called. All those in favour? Opposed, if any? Let the record show that the motion was unanimous.

---Carried

Does the committee agree that this matter is concluded?

SOME HON. MEMBERS: Agreed.

---Agreed

CHAIRMAN (Mr. Wah-Shee): On behalf of the committee, I would like to thank Dr. David Kinloch an Dr. Luis Barreto, as well as the Minister who introduced this topic to the committee. Thank you.

---Applause

I will rise to report progress.

MR. SPEAKER: Mr. Wah-Shee.

REVERT TO ITEM 18: REPORT OF COMMITTEE OF THE WHOLE

REPORT OF COMMITTEE OF THE WHOLE OF BILL 34-87(1), PUBLIC SERVICE ACT; BILL 4-87(1), CHILD DAY CAR ACT; MINISTER'S STATEMENT 57-87(1), AIDS

MR. WAH-SHEE: Mr. Speaker, your committee concluded 10 minutes ago.

---Laughter

Your committee has been considering Bill 34-87(1), Bill 4-87(1), and the Minister of Health's statement on AIDS. Mr. Speaker, I wish to report that Bill 34-87(1) is ready for third reading a amended. Further, Mr. Speaker, the discussion on Minister's Statement 57-87(1), on AIDS, has bee concluded with one motion being adopted.

Motion To Accept Report Of Committee Of The Whole, Carried

Mr. Speaker, I move that the report of the committee of the whole be concurred with.

MR. SPEAKER: Thank you, Mr. Wah-Shee. Members have heard the report of the chairman of th committee of the whole. Are you agreed?

SOME HON. MEMBERS: Agreed.

---Carried

MR. S

MR. A r. If you can agree, I would like to return t Item

MR. S aq. You have the floor.

ITEM

Membe Of Commons, Ottawa

MR. AI e we have a great concern about constitutiona develc rritories were not allowed to participate i consti hereas federal financial assistance to project in th velopment is being thwarted in both avenues territ want to let it be known that I am no longe satisf House of Commons in Ottawa, Thomas Suluk an David n national issues. I have never heard the repres

MR. SP ... Item 3, members' statements. Mr. Clerk, announcements an orders of the day.

ITEM 20: ORDERS OF THE DAY

CLERK OF THE HOUSE (Mr. Hamilton): Orders of the day for Friday, June 5th at 10:00 a.m.

1. Prayer

2. Ministers' Statements

Checklist of Curriculum Materials

Section	Lesson	Pages	Other
Binders#			
Intro		1- 30	
K-M & E	4	1- 34	
G & D	6	1- 44	
Dental	4	1- 31	
Nutrition	4	1- 37	
G1-M & E	6	1- 54	
G & D	4	1- 38	
FL	6	1- 69	
Dental	7	1- 61	
Nutrition	7	1- 73	
G2-M & E	6	1- 60	
G & D	7	1- 50	
FL	5	1- 47	
Nutrition	5	1- 53	
Dental	5	1- 41	
G3-M & E	8	1- 61	
G & D	6	1- 54	
FL	5	1- 50	
Dental	4	1- 45	
Nutrition	4	1- 53	
G4-M & E	7	1- 41	
G & D	6	1- 51	
FL	8	1- 70	
Nutrition	5	1- 80	
G5-M & E	8	1- 47	
G & D	7	1- 69	
FL	7	1- 71	
Nutrition	6	1- 72	
G6-M & E	8	1- 57	
G & D	8	1- 84	
FL	9	1- 89	
Nutrition	6	1-104	
G7-M & E	5	1- 35	
G & D	6	1- 73	
FL	10	1- 91	
Nutrition	5	1- 82	
AIDS	2(1+2)	1- 18 45-54	

Section	Lesson	Pages	Other
G8-M & E	6	1- 41	
G & D	8	1- 96	
FL	9	1-114	
Nutrition	4	1- 90	
AIDS	2(3+4)	25-32 45-54	
G9-M & E	3	1- 48	
G & D	6	1- 54	
FL	9	1- 71	
Nutrition	5	1- 64	
AIDS	1 (5)	37-39 45-54	

K-3-Alcohol & Drugs
- Prevention Program Book 1-192
- Envelope 8 sets of resource cards
- Envelope with photos
- Cassette tape
- Fishing rod materials
- Gertrude McFuzz Storybook
- Photo drugstore/N.S.
- Map N.W.T.
- Envelope with photos substances

G4,5,6 - Alcohol & Drugs
- Program Guide 1-232
- Resource cards
- Teacher resources
- Human body chart
- Factor posters
- Envelope with photos substances

G7,8,9 - Alcohol & Drugs
- program guide 1-268
- Factor posters
- Envelope with overheads
- Teacher resources
- Sarah T. Book

School _____

QUESTIONS: Appendix 3

Interview with individual teachers

I am examining the implementation of the NWT School Health Curriculum. Various factors have been identified and implicated in affecting the implementation process. I will be asking you some questions that might not appear to be related to implementation of a school health curriculum but in fact all of these questions are related to the factors identified in the research on implementation.

1. Do you teach health?

   a) yes
   b) no
   c) other_____

2. How many years have you been teaching in the NWT?

   a) 0 years
   b) 1 year
   c) 2 years
   d) more than 2 years
   e) other _____

3. How comfortable are you in teaching health?

   a) very comfortable
   b) moderately comfortable
   c) somewhat comfortable
   d) uncomfortable
   e) other _____

4. Do you use the NWT School Health Curriculum?

   a) yes
   b) no
   c) some parts
   d) other _____

5. Where can you access the NWT School Health Curriculum?

   a) library
   b) own copy
   c) other _____

6. What units of the curriculum do you use?

a) Emotional wellbeing
b) Family life
c) Dental
d) Nutrition
e) Alcohol and other drugs
f) Growth and development
g) Other _____

Why? _____

_____

7. What units of the curriculum do you not use?

a) Emotional wellbeing
b) Family life
c) Dental
d) Nutrition
e) Alcohol and other drugs
f) Growth and development
g) Other _____

Why? _____

_____

8. What parts of the curriculum do you use?

_____

_____

_____

Why?

_____

_____

9. What parts of the curriculum do you not use?

_____

_____

_____

Why?

_____

_____

10. What preparation time is required to teach a class?

a) < 30 min.
b) < 60 min.
c) > 60 min.
d) other _____

11. What resource people do you involve?

a) educational professionals
b) health professionals
c) community resource personnel
d) other _____

Why? _____

_____

12. What additional resource materials do you use? Why?

_____

_____

_____

Why?

_____

_____

_____

13. Are resource materials readily available?

a) yes
b) no
c) some
d) other _____

14. How many hours per week are you involved in teaching health?

a) > 30 min.
b) 60 min.
c) 90 min.
d) > 90 min.
e) other _____

15. Did you receive an orientation to the NWT School Health Curriculum?

a) yes
b) no
c) other _____

Where? _____

By whom? _____

Was it effective?

a) yes
b) no
c) other _____

16. Have you received ongoing inservice relating to the NWT School Health Curriculum?

a) yes
b) no
c) other _____

Where? _____

By whom? _____

Was it beneficial?

a) yes
b) no
c) other _____

17. Have you received ongoing support when using the NWT. School Health Curriculum?

a) yes
b) no
c) other _____

By whom? _____

Was it beneficial?

a) yes
b) no
c) other _____

18. How many meetings have been held in your school to discuss the NWT. School Health Curriculum?

a) none
b) 1-5
c) many
d) other _____

19. In what other implementation projects have been involved with during the past year?
a) none
b) few
c) many
d) other _____

In the past

a) none
b) few
c) many
d) other _____

20. Have you read the introduction to the NWT. School Health Curriculum?

a) yes
b) no
c) other _____

21. Do you have any comments about the introduction section of the curriculum?

_____

_____

_____

22. Have you read the entire curriculum for the grade that you teach?

a) yes
b) no
c) other _____

For the previous grade?

a) yes
b) no
c) other _____

For the next grade?

a) yes
b) no
c) other _____

The entire curriculum?

a) yes
b) no
c) other _____

23. How complex is the curriculum?

a) very complex
b) average
c) simple
d) other _____

24. How appropriate is the NWT School Health Curriculum for the students you teach?

a) very appropriate
b) mediocre
c) not appropriate
d) other _____

25. In what health curricular activities are the students expected to participate?

_____

_____

_____

Do they?

a) yes / usually
b) sometimes
c) no / never
d) other _____

26. If you have suggestions for changes to the NWT School Health Curriculum, to whom would you submit them?

_____

_____

27. How has the Regional Board and/or the Department of Education assisted/hindered implementation of the NWT School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

28. How does the principal assist and/or hinder the implementation of the NWT School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

Other _____

29. In what ways do other teachers assist and/or hinder implementation of the NWT School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

30. What types of inservice training in health education would be of most benefit to you now?

a) orientation
b) content (subject matter)
c) teaching methods
d) teacher sharing sessions
e) other _____

31. How many years have you been teaching?

a) < 2 years
b) 2-5 years
c) > 5 years
d) other _____

32. How many years have you been teaching in the NWT?

a) < 2 years
b) 2-5 years
c) > 5 years
d) other _____

33. What grade level do you teach?

_____

34. What university or other courses have you taken in health and/or science?

a) university health _____
b) university science _____
c) other health _____
d) other science _____
e) other related _____

35. What are your educational qualifications?

a) B.A.
b) B. Sc.
c) Degree in Education
d) Specialty _____
e) Other _____

36. Any comments of a personal nature that you wish to make about the NWT School Health Curriculum or about its implementation?

_____

_____

_____

_____

_____

Interview with principals

I am examining the implementation of the NWT School Health Curriculum. Various factors have been identified and implicated in affecting the implementation process. I will be asking you some questions that might not appear to be related to implementation of a school health curriculum but in fact all of these questions are related to the factors identified in the research on implementation.

1. Has the introduction of the NWT School Health Curriculum been easy?

   a) yes
   b) no
   c) other _____

2. How long have you been involved with teachers that teach health?

   a) 0 years
   b) 1 year
   c) 2 years
   d) > 2 years
   e) other _____

3. Are you comfortable that your teachers are required to teach health?

   a) very comfortable
   b) moderately comfortable
   c) somewhat confortable
   d) other _____

4. Is the NWT School Health Curriculum being used at your school?

   a) yes
   b) no
   c) some parts
   d) other _____

5. Where can you or the teachers access the NWT School Health Curriculum?

   a) library
   b) own copy
   c) other _____

6. What resource people are being used at your school to assist in health?

   a) educational professionals
   b) health professionals
   c) community resource personnel
   d) other _____

7. What additional resource materials are being used at your school to teach health?

_____

_____

_____

Why?

_____

_____

_____

8. Are resource materials readily available?

a) yes
b) no
c) some
d) other _____

9. Is it your perception that health is being taught at your school most weeks to all students?

a) yes
b) no
c) do not know
d) other _____

10. Did you receive an orientation to the NWT School Health Curriculum?

a) yes
b) no
c) other _____

Where? _____

By whom? _____

Was it effective?

a) yes
b) no
c) other _____

11. Have you received ongoing inservice relating to the NWT School Health Curriculum?

a) yes
b) no
c) other _____

Where? _____

By whom? _____

Was it beneficial?

a) yes
b) no
c) other _____

12. Have you received ongoing support when using the NWT School Health Curriculum?

a) yes
b) no
c) other _____

By whom? _____

Was it beneficial?

a) yes
b) no
c) other _____

13. How many meetings have been held in your school to discuss the NWT School Health Curriculum?

a) none
b) 1-5
c) many
d) other _____

14. In what other implementation projects have been involved with during the past year?
a) none
b) few
c) many
d) other _____

In the past

a) none
b) few
c) many
d) other _____

15. Have you read the NWT School Health Curriculum?

a) yes
b) no
c) parts
d) other _____

16. How complex is the curriculum?

a) very complex
b) average
c) simple
d) other _____

17. How appropriate is the NWT School Health Curriculum for the students?

a) very appropriate
b) mediocre
c) not appropriate
d) other _____

18. If you have suggestions for changes to the NWT School Health Curriculum, to whom would you submit them?

_____

_____

19. How has the Regional Board and/or the Department of Education assisted/hindered implementation of the NWT School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

20. How have you assisted/hindered the implementation of the NWT. School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

Other _____

21. In what ways do teachers assist and/or hinder implementation of the NWT. School Health Curriculum?

Assisted by _____

_____

Hindered by _____

_____

22. How receptive are the students to health education?

a) very
b) somewhat
c) not really
d) other _____

23. How receptive is the community to the teaching of health in the school.

a) very
b) somewhat
c) not really
d) other _____

24. Does the NWT. School Health Curriculum make a difference to the students' behavior/attitude?

a) yes
b) no
c) somewhat
d) other _____

25. What factors have made it easier to teach health in your school?

_____

_____

26. What barriers or obstacles to teaching health have you encountered in this school?.

_____

_____

_____

27. What types of inservice training in health education would be of most benefit now?

a) orientation
b) content (subject matter)
c) teaching methods
d) teacher sharing sessons
e) other _____

28. What would assist you in further implementing the NWT School Health Curriculum?

_____

_____

_____

29. When do you think the NWT School Health Curriculum will be fully implemented across the NWT? What would assist in that process?

_____

_____

30. Were you a participant in piloting, developing or in any way involved in the initial setting up of the curriculum?

a) yes
b) no
c) other _____

31. How many years have you been teaching?

a) < 2years
b) 2-5 years
c) > 5 years
d) other _____

32. How many years have you been teaching in the NWT?

a) < 2years
b) 2-5 years
c) > 5 years
d) other _____

33. How many years have you been a principal?

a) < 2years
b) 2-5 years
c) > 5 years
d) other _____

34. What university or other courses have you taken in health and/or science?

a) university health _____
b) university science _____
c) other health _____
d) other science _____
e) other related _____

35. What are your educational qualifications?

a) B.A.
b) B. Sc.
c) Degree in Education
d) Specialty _____
e) Other _____

36. Any comments of a personal nature that you wish to make about the NWT. School Health Curriculum or about its implementation?

_____

_____

_____

_____

_____

Interview with group of teachers

1. Were any of you participants in piloting, developing or in any way involved in the initial setting up of the curriculum?

2. Has the introduction of the NWT School Health Curriculum been easy?

3. How receptive are the students to health education?

4. How receptive is the community to the teaching of health in the school?

5. What have made things easier for you to teach health?

6. What barriers or obstacles have you experienced to teaching health?

7. What areas of the curriculum are the most difficult to teach?

8. Does the NWT School Health Curriculum make a difference to the students' behavior/attitude?

9. Are the teaching strategies, materials, topics, etc. worthwhile?

10. What would assist you in further implementing the NWT School Health Curriculum?

11. When do you think the NWT School Health Curriculum will be fully implemented across the NWT? What would assist in that process?

CONSENT FORM

I am a graduate student at the University of Manitoba and will be conducting a research project as partial fulfilment of the requirements for a master's thesis. The research involves an assessment of the implementation status of the Northwest Territories School Health Curriculum. Schools in three Northwest Territories have been chosen for the study.

An important element of the assessment is to determine if you as teachers of the curriculum, have encountered inhibitory barriers and/or beneficial strategies to implementing the curriculum.

All information obtained during interviews and discussions will be held in confidence and only a summary of the findings will be shared with the GNWT and my thesis advisors at the University of Manitoba. An abstract of the thesis will be sent to the principals of the participating schools for circulation to teachers next fall.

Those of you who kindly decide to participate will be requested to:

1. Take part in a one on one interview with me, approximate duration 20 minutes; and/or

2. Participate in a 45 minute group interview with other teachers in your school.

I wish to emphasize that I will not be evaluating your teaching ability nor the administration of your school. My interest is simply how the Northwest Territories School Health Curriculum is viewed by teachers and principals and how much of it is being implemented.

I would appreciate your participation in this study, but realize that it is your right to refuse to do so or to discontinue such participation at any time without penalty or prejudice.

You may obtain further information, if required, by contacting myself (Sharon Kirwan), at 204-269-0680, or Professor Dexter Harvey at 204-474-9013.

I agree to participate in the interview(s).

_____ _____

Signature of teacher/principal Date

_____

Signature of interviewer

Appendix 7

Summary of Data From Interview Questions

Individual Teachers Interviews [T]

- 36 Teachers were interviewed

T1. Do you teach health?

a) yes ------ 36

b) no ------ 0

c) other ---- 0

Total -------- 36

T2. How many years have you been teaching health in the N.W.T.?

a) less than 1 year ----- 1

b) 1 year ---------- 11

c) 2 years ---------- 9

d) more than 2 years ---- 15

Total ---------- 36

T3. How comfortable are you in teaching health?

a) very comfortable ---------- 20

b) moderately comfortable ---- 7

c) somewhat comfortable ------ 3

d) uncomfortable ---------- 1

e) other ---------- 5

Total ---------- 36

"other" included:

- comfortable in the lower grades, not in the upper grades
- comfortable in areas where had inservice
- comfortable in all areas except family life and sexual abuse

T4. Do you use the N.W.T. School Health Curriculum?

a) yes ------- 23

b) no -------- 0

c) parts ----- 13

d) other ----- 0

Total --------- 36

T5. Where can you access the N.W.T. School Health Curriculum?

a) library ------- 4

b) own copy ------ 32

c) other --------- 25

36 teachers were interviewed but most teachers gave more than 1 response

"own copy" usually indicated teachers' own grade not the complete curriculum

"other" included:

- principal's office, vice-principal's office, resource room, workroom, another teacher, consultant

T6. What units of the curriculum do you use?

a) emotional wellbeing ---------- 33 --- 92%

b) family life ---------- 29 --- 81%

c) dental* ---------- 16 --- 44%

d) nutrition ---------- 23 --- 64%

e) alcohol and other drugs ------ 19 --- 53%

f) growth and development ------- 27 --- 75%

g) other ---------- 0

Total of 36 teachers ----------137 responses

*not all of the teachers had received the dental unit

T7. What units of the curriculum do you not use?

a) emotional wellbeing ---------- 1 --- 3%

b) family life ---------- 6 --- 17%

c) dental* ---------- 16 --- 44%

d) nutrition ---------- 11 --- 31%

e) alcohol and other drugs ------ 16 --- 44%

f) growth and development ------- 6 --- 17%

g) other ---------- 0

Total of 36 teachers

*not all of the teachers had received the dental unit

T8. What parts of the curriculum do you use?

The response included:

- teacher background information x 6
- layout of lesson plans x 4
- activity sheets x 4
- all useful x 13
- anyone can teach from it x 2
- combination x 2
- adapt by teacher x 4
- need more on family abuse
- one of the best workable and useful curriculum
- practical
- themes universal
- situation cards useful x 3

T9. What parts of the curriculum do you not use?

- teacher background information
- parts repetitious

- some parts too simple for students x 7
- don't like it, confusing
- feeling words difficult for students
- settlement oriented x 4
- many activities, a waste of paper
- no tests, only suggest testing
- needs to be in French x 3
- activities poor at higher levels
- teachers' background information used for students x 2

T10. What preparation time is required to teach a class?

a) < 30 minutes ---------- 27

b) < 60 minutes ---------- 2

c) > 60 minutes ---------- 0

d) other ---------- 7

Total ---------- 36

" other" responses included:

- integrated with other themes x 2
- varies by unit x 2
- depends on outside reading
- three hours per unit then 20 minutes per class

- some has to be translated into French but some is taught in English

T11. What resource people do you involve?

a) educational professionals -------- 2

b) health professionals ---------- 30

c) community resource personnel ----- 26

d) other ---------- 0

Total of 36 teachers ---------- 58 responses

T12. What additional resource materials do you use?

Responses included:

- films and film strips
- videos
- posters
- brochures and pamphlets
- kits
- puzzles
- models
- buttons
- charts

T13. Are resource materials readily available?

a) yes ---------- 17

b) no ---------- 11

c) some --------- 3

d) other -------- 5

Total ---------- 36

"other" responses included:

- don't know
- didn't look
- depends on the unit
- as easy as is possible in the N.W.T.
- need more in French
- no resource catalogue x 5

T14. How many hours per week are you involved in teaching health?

a) > 30 minutes ---------- 9

b) 60 minutes ---------- 6

c) 90 minutes ---------- 5

d) > 90 minutes ---------- 9

e) other ---------- 7

Total ---------- 36

"other" responses included:

- 30 minutes to 3 hours per week
- 10 hours per term
- 86 minutes every 6 day cycle
- in blocks of 90 minutes per theme
- mixed with others

T15. Did you receive an orientation to the N.W.T. School Health Curriculum?

a) yes ---------- 11

b) no ---------- 25

c) other -------- 0

Total ---------- 36

T16. Have you received ongoing inservice relating to the N.W.T. School Health Curriculum?

a) yes ---------- 7

b) no ---------- 29

c) other -------- 0

Total ---------- 36

T17. Have you received ongoing support when using the N.W.T. School Health Curriculum?

a) yes ---------- 8

b) no ---------- 25

c) other -------- 3

Total ---------- 36

"other" responses included:

- I don't know

T18. How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?

a) none ---------- 28

b) 1 to 5 -------- 5

c) many ---------- 0

d) other --------- 3

Total ---------- 36

"other" responses included:

- 1 meetings 3 years ago
- health was included occasionally in departmental meetings but no meetings were dedicated to health

T19. In what other implementation projects have you been involved with during the past year?

a) none ---------- 14

b) few ---------- 21

c) many ---------- 0

d) other --------- 1

Total ---------- 36

"other" response was from a new teacher who thought everything was new

In the past?

a) none ---------- 15

b) few ---------- 12

c) many ---------- 9

Total ---------- 36

T20. Have you read the introduction to the N.W.T. School Health Curriculum?

a) yes ---------- 20

b) no ---------- 15

c) other -------- 1

Total ---------- 36

"no" responses included:

- 2 teachers stated that they did not have a copy of the introduction

"other" responses included:

- don't remember

T21. Do you have any comments about the introduction section of the curriculum?

Responses included:

- clear
- good information
- needs hands on and updated regularly
- umbrella effect
- have to be flexible and selective

T22. Have you read the entire curriculum for the grade that you teach?

a) yes ---------- 30

b) no ---------- 5

c) other -------- 1

Total ---------- 36

"other" responses included:

- have read the parts that the teacher found

For the previous grade?

a) yes ---------- 11

b) no ---------- 23

c) other -------- 2

Total ---------- 36

"other" responses included:

- 2 teachers who teach kindergarten and therefore there was no previous curriculum

For the next grade?

a) yes ---------- 10

b) no ---------- 20

c) other -------- 6

Total ---------- 36

"other" responses included:

- only in family life
- 5 teachers teach grade 9 and therefore there was no next grade curriculum

The entire curriculum?

a) yes ---------- 0

b) no ---------- 36

c) other -------- 0

Total ---------- 36

T23. How complex is the curriculum?

a) very complex ---------- 1

b) average ---------- 5

c) simple ---------- 26

d) other ---------- 4

Total ---------- 36

"other" responses included:

- too simple x 2
- complex because of lack of French translation
- requires more time than is available

T24. How appropriate is the N.W.T. School Health Curriculum for the students that you teach?

a) very appropriate ---------- 22

b) mediocre ---------- 5

c) not appropriate ---------- 8

d) other ---------- 1

Total ---------- 36

"other" responses included:

- not in French
- additional comment in a, b, and c "too simple" was added x 9

T25. In what health curricular activities are the students expected to participate?

Responses included:

- role playing
- stories
- brainstorming
- magazine searches
- games
- story writing
- puppets
- discussion
- lecture
- categorizing
- books
- cut and paste
- reading
- booklets
- debates
- create tests

- independent projects
- formal presentation
- research
- small groups
- songs
- poetry
- visitors
- art
- centres
- magic circle
- lunches
- visits

Do they?

a) yes/usually ---------- 29

b) sometimes ---------- 5

c) no/never ---------- 0

d) other ---------- 2

Total ---------- 36

"other" responses included:

- willing to participate if teacher participates
- sometimes language is a problem

T26. If you have suggestions for changes to the N.W.T. School Health Curriculum to whom would you submit them?

Responses included:

- principal
- consultant in Yellowknife
- regional consultant
- another teacher who is charge of health
- school board
- the address is in the curriculum
- don't know

T27. How has the Regional Board and/or the Department of Education assisted/hindered implementation of the N.W.T. School Health Curriculum?

"assisted responses" included:

- principal
- provided materials
- sent to conference
- meeting on family life
- inservice for teachers
- complete lesson plans

"hindered responses" included:

- discipline problems in students but affects all subject areas
- curriculum sent out in bits
- curriculum has lots of useless paper
- need a scope and sequence
- should be mandatory to teach family life
- poor process of distribution
- waiting for materials
- need translation into French
- didn't get own copy, had to share
- nothing since initial orientation
- need more materials and training
- time allotment
- don't know

T28. How does the principal assist and/or hinder the implementation of the N.W.T. School Health Curriculum?

"assisted responses" included:

- meetings to discuss family life
- helped with speakers
- liaison between school and community
- supportive
- hands out manuals

- newsletters and memos to teachers
- can go to get help
- expects us to teach and get on with it
- left up to teachers
- gives one teacher extra time to assist other teachers with health
- positive attitude
- need help just ask
- freedom to teach
- just passes on things
- doesn't check
- doesn't get in the way
- not either hinder nor help
- no help
- behind us
- if problems just speak to principal
- rebound things off the principal
- encouraging
- I don't know
- neutral

"hindered" responses included:

- no help
- lack of money
- lack of consultants

- no orientation
- not anything
- can't get through everything in time
- budget for health should be separate not part of physical education
- too many constraints

T29. In what ways do other teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?

"assisted" responses included:

- sharing ideas
- sharing resources
- everyone's kids
- team teaching
- being supportive
- sharing teaching
- sharing speakers, field trips
- discussions
- don't know

"hindered" responses included:

- not enough audio visual equipment
- being shot down by others
- not enough time
- some teachers uncomfortable with certain topics, e.g. sexual abuse, homosexuality
- some teachers in senior grades have not dealt with own feelings
- inappropriate methods of student behaviour control
- not anything

T30. What types of inservice training in health education would be of most benefit to you now?

a) orientation ---------- 11
b) content ---------- 9
c) teaching methods ---------- 8
d) teaching sharing methods ----- 17
e) other ---------- 22
Total 36 teachers ---------- 67 responses

"other" responses included:

- hands on workshop
- brainstorming
- inservice

- resource list for teachers x 6
- model how to approach sexual abuse
- observe actual teaching
- new units need inservice
- AIDS information
- updated information
- don't know what is available
- review of philosophy and objectives
- course at university

T31. How many years have you been teaching?

a) < 2 years ---------- 6

b) 2 - 5 years -------- 10

c) > 5 years ---------- 20

d) other -------------- 0

Total ------------------ 36

T32. How many years have you been teaching in the N.W.T.?

a) < 2 years ---------- 11

b) 2 - 5 years -------- 13

c) > 5 years ---------- 12

d) other -------------- 0

Total ------------------ 36

T33. What grade level do you teach?

a) K to 3 ---------- 20

b) 4 to 6 ---------- 11

c) 7 to 9 ---------- 5

Total --------------- 36

* 1 teacher taught health in grade 6, 7, 8, 9, and was included in c) 7 to 9

T34. What university or other courses have you taken in health and/or science?

Course	Taken	Not Taken	Total
a) University health	13	23	36
b) University science	22	14	36
c) Other health	2	34	36
d) Other science	6	30	36
e) Other related	0	0	0

"other" health included:

- health methods
- curriculum
- instruction in health

"other" science included:

- how to teach science
- elementary school science
- psychology
- scientific theory

T35. What are your educational qualifications?

a) B.A. ---------- 13

b) B.Sc. ---------- 1

c) Degree in Education ------ 28

d) speciality and other ----- 13

"other" responses included:

- Diploma in Education x 3
- Teacher Education Program Fort Smith
- Master of Arts x 2
- Master of Education x 4
- Ph.D Education and Administration
- Teaching Certificate

T36. Any comments of a personal nature that you wish to make about the N.W.T. School Health Curriculum or about its implementation?

Responses included:

- good, up to date
- need to get parental involvement
- ongoing progressive program
- library needs to stock information in school
- need in school prep time
- helpful to have 1 binder for each grade

- STD's not integrated enough
- need STD's earlier
- parents need to be more aware
- nice step by step
- drug and alcohol should be included in the binder
- need more technical information
- set up not consistent
- health not a priority to parents
- good curriculum
- simple for kids to understand
- grade 3 and 4 needs more
- like the curriculum
- doesn't allow for creativity
- lessons aren't necessary, covered in social studies
- too long
- lesson plans good
- materials needed to supplement curriculum
- good for new teachers
- more bibliography and resource catalogue needed
- excellent
- 1 sided copying poor
- layout good

- indexed would make it easier
- needs to be translated into French
- family life reasonable
- decision making good
- relevant to N.W.T.
- worthwhile comprehension
- sequence good
- doesn't talk down to children
- topics good but content too simple
- important to teach health
- AIDS should be integrated
- appreciate 1 package for a grade
- continuity poor between grades
- not an academic course
- lacking consistency between teachers
- needs more tests included

Summary of Data from Interview Questions

Principal Interviews [P]

- 6 principals, 1 vice-principal and 1 Regional Educational Consultant, for a total of 8 interviewed

P1. Has the introduction of the N.W.T. School Health Curriculum been easy?

a) yes ---------- 4

b) no ---------- 2

c) other -------- 2

Total ---------- 8

"other" responses included:

- don't know
- Mr. Hanley's letter helped

P2. How long have you been involved with teachers that teach health?

a) 0 years ---------- 0

b) 1 year ---------- 0

c) 2 years ---------- 0

d) > 2 years -------- 8

e) other ---------- 0

Total ---------- 8

P3. Are you comfortable that your teachers are required to teach health?

a) very comfortable ---------- 5

b) moderately comfortable ---- 2

c) somewhat comfortable ------ 1

d) other ---------- 0

Total ---------- 8

P4. Is the N.W.T. School Health Curriculum being used at your school?

a) yes ---------- 8

b) no ---------- 0

c) some parts --- 0

d) other -------- 0

Total ---------- 8

P5. Where can you or the teachers access the N.W.T. School Health Curriculum?

a) library ---------- 3

b) own copy --------- 4

c) other ---------- 7

Total - 8 people ----- 14 responses

"other" responses included:

- resource centre
- office

P6. What resource people are being used at your school?

a) educational professionals ----- 4

b) health professionals ---------- 7

c) community resource personnel -- 5

d) other ---------- 0

Total - 8 people ---------- 16 responses

P7. What additional resource materials are being used at your school to teach health?

responses included:

- videos
- kits

- pamphlets, brochures
- AIDS material
- National Film Board films
- library
- posters
- models
- books

P8. Are resource materials readily available?

a) yes ---------- 5

b) no ---------- 2

c) some --------- 1

d) other -------- 0

Total ---------- 8

P9. Is it your perception that health is being taught at your school most weeks to all students?

a) yes ---------- 4

b) no ---------- 1

c) do not know -- 0

d) other -------- 3

Total ---------- 8

"other" included:

- integrated approach
- theme approach x 2

P10. Did you receive an orientation to the N.W.T. School Health Curriculum?

a) yes ---------- 5

b) no ---------- 3

c) other -------- 0

Total ---------- 8

P11. Have you received ongoing inservice relating to the N.W.T. School Health Curriculum?

a) yes ---------- 2

b) no ---------- 6

c) other -------- 0

Total ---------- 8

P12. Have you received ongoing support when using the N.W.T. School Health Curriculum?

a) yes ---------- 1

b) no ---------- 7

c) other -------- 0

Total ---------- 8

P13. How many meetings have been held in your school to discuss the N.W.T. School Health Curriculum?

a) none ---------- 3

b) 1-5 ---------- 5

c) many ---------- 0

d) other --------- 0

Total ---------- 8

"1-5" meetings responses included:

- staff meetings, health was mentioned x 4
- teachers who taught health met to discuss grades 7-9

P14. In what other implementation projects have you been involved with during the past year?

a) none ---------- 0

b) few ---------- 8

c) many ---------- 0

d) other --------- 0

Total ---------- 8

In the past?

a) none ---------- 0

b) few ---------- 3

c) many ---------- 5

d) other --------- 0

Total ---------- 8

P15. Have you read the N.W.T. School Health Curriculum?

a) yes ---------- 5

b) no ---------- 0

c) parts -------- 3

d) other -------- 0

Total ---------- 8

P16. How complex is the curriculum?

a) very complex ---------- 0

b) average ---------- 0

c) simple ---------- 8

d) other ---------- 0

Total ---------- 8

P17. How appropriate is the N.W.T. School Health Curriculum for the students?

a) very appropriate ---------- 7

b) mediocre ---------- 1

c) not appropriate ---------- 0

d) other ---------- 0

Total ---------- 8

"mediocre" was qualified with "this curriculum is the best one in the N.W.T."

P18. If you have suggestions for changes to the N.W.T. School Health Curriculum to whom would you submit them?

responses included:

- Helen Ballanoff (Department of Education)
- principal
- board
- consultant

P19. How has the Regional Board and/or the Department of Education assisted/hindered implementation of the N.W.T. School Health Curriculum?

"assisted" by:

- providing detailed curriculum
- support in dollars
- internal inservice
- support in principle
- don't know

"hindered" by:

- supported in principle but not in practice
- short staffed, lacking consultants
- board should provide inservice days for health
- too many new curricula
- need money for inservice
- need a coordinator
- few have been orientated to health curriculum

P20. How have you assisted the implementation of the N.W.T. School Health Curriculum?

responses included:

- supported by piloting the health curriculum
- conference with teachers
- very little

- insuring materials available
- introduction sessions
- parents' meetings
- involved with original inservicing and therefore used as a resource person
- integrated with social studies and science
- personal contact
- helped in getting inservice for teachers

P21. In what ways do teachers assist and/or hinder implementation of the N.W.T. School Health Curriculum?

"assisted" by:

- talking to each other
- support
- ideas between teachers
- collaboration
- translation into French
- share resources

"hindered" by:

- social problems of the community
- in family life, how far to go without parents' consent
- culture shock

- alienation in Native northern community
- teachers think this is a "flash in the pan", health will fade out

P22. How receptive are the students to health education?

a) very ---------- 7
b) somewhat ------ 1
c) not really ---- 0
d) other --------- 0
Total ------------ 8

P23. How receptive is the community to the teaching of health in the school?

a) very ---------- 2
b) somewhat ------ 0
c) not really ---- 0
d) other --------- 6
Total ------------ 8

"other" responses included:

- don't care
- education not important
- poor support
- nurses like it

- don't know
- family life a problem

P24. Does the N.W.T. School Health Curriculum make a difference to the student's behaviour/attitude?

a) yes ---------- 3

b) no ---------- 1

c) somewhat ----- 4

d) other -------- 0

Total ---------- 8

"somewhat" response: all 4 added "don't know".

P25. What factors have made it easier to teach health in your school?

responses included:

- board support
- nursing station support
- no interference from parents
- support of Community Education Committee
- resource materials available
- curriculum
- consultant
- AIDS
- climate in school

- cooperation and support
- curriculum integration into other subjects
- whole language
- community school

P26. What barriers or obstacles to teaching health have you encountered in the school?

responses included:

- lack of planning time
- not any real obstacles
- time, can't do everything
- never enough resource materials
- need a catalogue of health resources available
- consultants lacking
- high staff turnover
- lack of yearly orientation
- lack of cooperation
- negativism about the community and administration
- teachers simply not doing it
- lack of inservice
- lack of awareness of elementary teachers of the seriousness of health e.g. AIDS, child abuse, drugs and alcohol

P27. What types of inservice training in health education would be of most benefit now?

a) orientation ---------- 7

b) content ---------- 1

c) teaching methods ---------- 1

d) teacher sharing sessions --- 2

e) other ---------- 4

Total - 8 people ---------- 15 responses

"other" responses included:

- family life
- refresher course
- time

P28. What would assist you in further implementing the N.W.T School Health Curriculum?

responses included:

- money
- consultants
- Yellowknife, Department of Education personnel to conduct inservice
- updating
- time
- teacher to coordinate in school

- translation into French
- orientation of new staff
- develop more support materials
- more support to each other

P29. When do think the N.W.T. School Health Curriculum will be fully implemented?

responses included:

- don't know x 3
- 1-2 years
- 5 years if the department sticks to it
- as well as it will be, at present
- in Yellowknife, all are doing it

P30. Were you a participant in piloting, developing, or in any way involved in the initial setting up of the curriculum?

a) yes ---------- 4

b) no ---------- 4

c) other -------- 0

Total ---------- 8

P31. How many years have you been teaching?

a) <2 years ---------- 0

b) 2-5 years --------- 0

c) 5 years ---------- 8

d) other ---------- 0

Total ---------- 8

P32. How many years have you been teaching in the N.W.T.?

a) <2 years --------- 1

b) 2-5 years -------- 1

c) 5 years ---------- 6

d) other ---------- 0

Total ---------- 8

P33. How many years have you been a principal?

a) <2 years --------- 1

b) 2-5 years -------- 1

c) >5 years --------- 4

d) other ---------- 0

Total*---------- 6

*Total does not include the vice principal nor the consultant, only the 6 principals

P34. What university or other courses have you taken in health and/or science?

Course	Taken	Not Taken	Total
a) University health	4	4	8
b) University science	3	5	8
c) Other health and d) Other science and e) Other related	2 (c and d and e)		

"other" included:

- counselling
- physical education methods

P35. What are your educational qualifications?

a) B.A. ---------- 3

b) B.Sc. ---------- 1

c) Degree in Education ---------- 5

d) Specialty and

e) Other ---------- 7

"other" responses included:

- M.Sc.
- Ph.D. Education and Administration
- M. Ed.
- N.W.T. Administration Certificate
- Teachers College Diploma

- Certificate Special Needs
- Education Graduate Diploma

P36. Any comments of a personal natures that you wish to make about the N.W.T. School Health Curriculum or about its implementation?

responses included:

- enough teacher information
- strategies reasonable
- very readable
- excellent curriculum
- did everything right, now have to continue to stress health
- good curriculum
- need more inservice
- need consultant for ongoing support in the school
- health expert in the school needed

Summary of Data From Interview Questions

Group Interviews [G]

- group included principals, vice principals, teachers, teacher assistant, consultant, for a total of 54 interviewed

G1. Were any of you participants in piloting, developing, or in any way involved in the initial setting up of the curriculum?

a) yes ---------- 10

b) no ---------- 44

Total ---------- 54

G2. Has the introduction of the N.W.T. School Health Curriculum been easy?

a) yes ---------- 24

b) no ---------- 3

c) other -------- 27

Total ---------- 54

"other" responses included:

- don't know
- easy in lower grades
- not in higher grades

G3. How receptive are the students to health education?

a) very ---------- 46
b) somewhat ------ 4
c) not really ---- 0
d) other --------- 4
Total ------------- 54

"other" responses included:

- receptive at earlier grades not higher levels

G4. How receptive is the community to the teaching of health in the school?

a) very ---------- 18
b) somewhat ------ 17
c) not really ---- 0
d) other --------- 19
Total ------------- 54

"other" responses included:

- don't know
- no feedback
- health not a priority

G5. What made things easier for you to teach health?

responses included:

- the actual curriculum
- 1 curriculum binder for each grade
- answered questions for first year teachers
- organized meeting on family life with support from Department of Education
- orientation by principal
- principal and other teachers
- Local Community Education Committee
- sharing ideas
- resource materials available
- support of board
- nursing station support
- lack of interference by parents
- audio visual aides
- consultant
- complete lesson plans

- AIDS
- curriculum to health needs
- teacher coordinator in school for support
- climate of school
- principal support in meeting about family life with parents
- sharing resources
- excellent response from parents
- compulsory
- level too low
- able to use with social studies
- administrative support

G6. What barriers or obstacles have you experienced to teaching health?

responses included:

- growth and development and family life, jumped around
- need more on drugs and alcohol
- family problems, need more on home problems
- lack of consultants
- lack of money
- no orientation

- culture
- certain families
- school preparation time
- resources in school library
- other teachers control abusive
- planning time
- need resource centre catalogue
- time
- resource materials
- language problems
- lack of audio visual equipment
- discipline problems
- learning disabilities
- alcohol unit not in with grade materials
- students older than in the grade expected
- English as a second language
- level too high
- high staff turnover
- negative about the community
- dissention in teachers
- too long
- produced in bits
- need laminated scope and sequence
- geared more to native students

- upper grades not appropriate, too simple
- process of distribution
- not in French
- didn't have own copy
- haven't used the resource centre, no catalogue
- language too simple
- lack of inservice
- continuity poor
- films and videos dated
- not considered an academic course
- not enough training
- need tests to be included

G7. What areas of the curriculum are the most difficult to teach?

a) emotional well being ---------- 3

b) family life ---------- 26

c) dental ---------- 0

d) nutrition ---------- 2

e) alcohol and drugs ---------- 13

f) growth and development -------- 6

g) other ---------- 4

No total is given, for this question was not answered by all respondents, for example the principals. As well, some respondents answered more than once.

G8. Does the N.W.T. School Health Curriculum make a difference to the students' behaviour/attitude?

a) yes ---------- 10

b) no ---------- 2

c) somewhat ----- 0

d) other -------- 42

Total ---------- 54

"other" responses included:

- hope so
- don't know

G9. Are the teaching strategies, materials, topics, etc. worthwhile?

responses included:

- yes
- good
- need to be more challenging
- clear and concise
- good because only have 15 students
- reasonable
- background teacher's information good
- some sections overdone

- didn't like curriculum, no creativity and too long - Inuit predominates
- practical
- relevant teaching ideas
- easy to follow
- fantastic
- organization great
- easy to use
- best curriculum
- decision making especially good
- useful
- index easy
- too simple
- songs dumb
- activity sheets good
- comprehensive
- situation cards good
- layout and lesson plans good
- worksheets too simple
- used teacher information for students because student material was too simple

G10. What would assist you in further implementing the N.W.T. School Health Curriculum?

responses included:

- resource list
- teachers' meeting to discuss curriculum
- need more technical information
- story based on literature
- need more on family life
- nutrition, same over and over
- photos in drug and alcohol need to be enlarged
- need integration to AIDS, STDs, family life and growth and development
- teachers' course on health
- orientation
- teacher sharing and updating regularly
- consultants for ongoing support in schools on health
- more money to the Regions
- resource people from Yellowknife
- could integrate health more into other subjects
- audio visual aides need to be more accessible
- teaching methods
- video and books on how to approach

- time
- another letter from Mr. Hanley in support for compulsory time in health
- resources for travel for consultants
- evaluation for all teachers towards health
- orientation for all teachers and principals
- planning time
- AIDS information for parents
- teacher coordinator in each school
- special teacher to teach health
- refresher course
- translation into French
- need own complete copy of grade, the teacher is teaching
- unit on safety
- need philosophy highlighted
- integrate alcohol and drugs into the total package
- more on alcohol and drugs
- catalogue from resource centre
- need health specialist to teach
- course at university
- budget specifically to health in the schools

G11. When do think the N.W.T. School Health Curriculum will be fully implemented across the N.W.T.? What would assist that process?

responses included:

- don't know
- 1 to 2 years
- don't know when all the pieces of the curriculum will be available
- sexual abuse, there is no backup, consultant told teachers not to teach unit until there is backup
- 5 years
- probably as implemented as it will ever be
- implemented at present
- in Yellowknife all doing it

SUMMARY OF CHECKLIST OF CURRICULUM MATERIALS

Section	Lesson	Pages	Other
Binders#			
Intro		1- 30	5
K-M & E	4	1- 34	4
G & D	6	1- 44	4
Dental	4	1- 32	3
Nutrition	4	1- 37	4
G1-M & E	6	1- 54	4
G & D	4	1- 38	4
FL	6	1- 69	4
Dental	7	1- 61	3
Nutrition	7	1- 73	4
G2-M & E	6	1- 60	4
G & D	7	1- 50	4
FL	5	1- 47	4
Nutrition	5	1- 53	4
Dental	5	1- 41	3
G3-M & E	8	1- 61	5
G & D	6	1- 54	5
FL	5	1- 50	5
Dental	4	1- 45	2
Nutrition	4	1- 53	4
G4-M & E	7	1- 41	5
G & D	6	1- 51	5
FL	8	1- 70	5
Nutrition	5	1- 80	5
Dental			1
G5-M & E	8	1- 47	4
G & D	7	1- 69	4
FL	7	1- 71	4
Nutrition	6	1- 72	5
Dental			1
G6-M & E	8	1- 57	4
G & D	8	1- 84	4
FL	9	1- 89	4
Nutrition	6	1-104	4
Dental			1
G7-M & E	5	1- 35	3
G & D	6	1- 73	3
FL	10	1- 91	3
Nutrition	5	1- 82	3
AIDS	2(1+2)	1- 18	2
		45-54	2

Section	Lesson	Pages	Other
G8-M & E	6	1- 41	3
G & D	8	1- 96	3
FL	9	1-114	3
Nutrition	4	1- 90	2
AIDS	2(3+4)	25-32	2
		45-54	
Dental			1
G8-M & E	3	1- 48	2
G & D	6	1- 54	2
FL	9	1- 71	2
Nutrition	5	1- 64	2
AIDS	1 (5)	37-39	1
		+45-54	
Dental			1

K-3 Alcohol & Drugs

- Prevention Program Book 1-192	5
- Envelope 8 sets of resource cards	5
- Envelope with photos	5
- Cassette tape	5
- Fishing rod materials	5
- Gertrude McFuzz Storybook	5
- Photo drugstore/N. S.	5
- Map N.W.T.	5
- Envelope with photo substances	5

G4, 5, 6 - Alcohol & Drugs

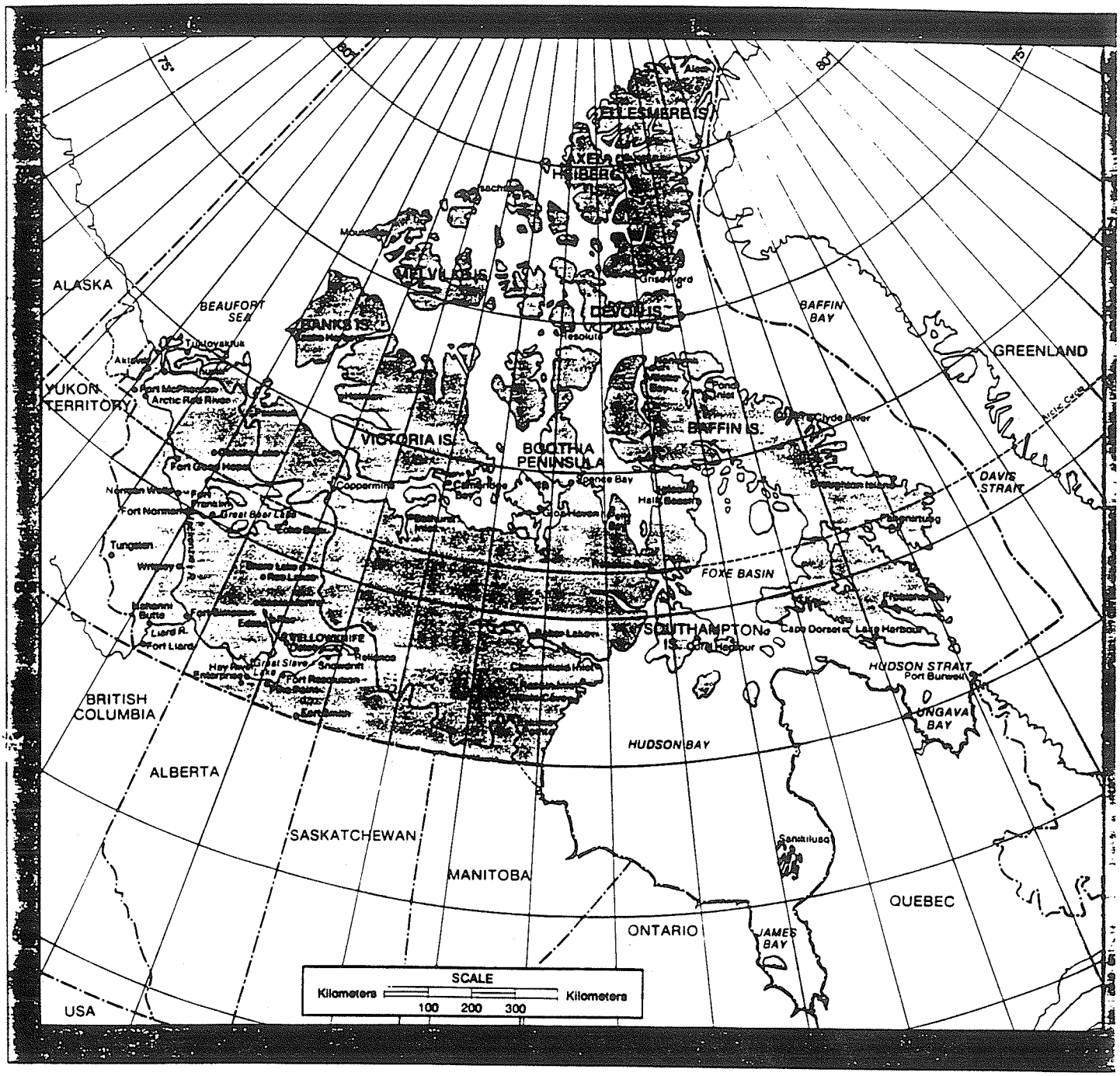
- Program guide 1-232	4
- Resource cards	4
- Teacher resources	4
- Human body chart	4
- Factor posters	4
- Envelope with photo substances	4

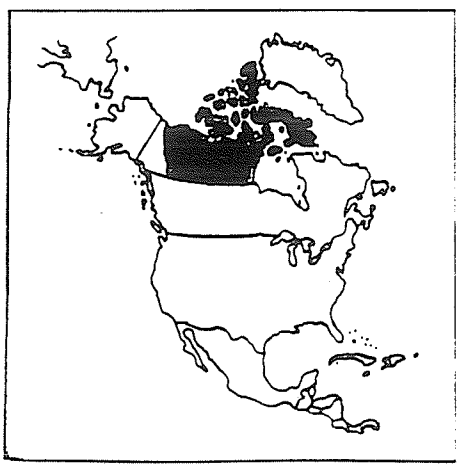
G7, 8, 9 - Alcohol & Drugs

- Program guide 1-268	2
- Factor posters	2
- Envelope with overheads	1
- Sarah T. Book	2
- Teacher resource	2

School total of 6

Northwest Territories





Northwest Territories Education

Appendix 12

FEB 07 1990

TERRY KEEFE
TOM STEWART
JIM MARTIN

Sharon Kirwan, formally an Assistant Regional Director for Nursing in the Northwest Territories is currently studying for her Master's Degree at the University of Manitoba. She is working with a Professor who worked with the Department of Education and Health in the development of the **N.W.T. School Health Program.** Sharon was a member of the School Health Development Committee during the time the Program was being planned and developed.

Since she is intensely interested in facilitators and obstacles to the implementation of the Health Program, she has decided to study implementation of a health program for her thesis. She has already designed some survey instruments to be used and is now looking for one or two schools in a number of regions in which she can conduct a survey. I have suggested that she contact you to discuss the possibility of conducting the survey in a Yellowknife school, in one of the schools in the Dogrib communities which is easy to access and in one community in the Kitikmeot region.

The Department of Education wishes to offer her as much assistance as possible. Some of the information which she will obtain from this study will help us as we attempt to monitor the implementation of the **N.W.T. School Health Program.**

I have written to Sharon indicating that she should contact you to discuss this further. You should expect to hear from her in the near future.

Helen Balanoff
Director
Student Support

cc: Sharon Kirwin

Ms. D. Wilson
Principal,
Ilihakvik School
Cambridge Bay, NT
X0E 0C0.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Dear Ms. Wilson:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview one teacher from each of the grades K to 5, the resource teacher for health (grades 6 to 9) and yourself individually, and all or as many of the teachers in your school as is possible as a group. I would like to interview teachers who have had success with the curriculum, likewise those who have experienced problems with it or for some reason have been unable to implement it. I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, so I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the days of May 28 -30, 1990 for visiting your school. I would very much appreciate it if you would confirm the times for the individual and group interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Tom Stewart.

Mr. Campbell
Principal,
William McDonald School
Yellowknife, NT.
X1A 2L8.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Dear Mr. Campbell:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview the three teachers who teach health and yourself individually, and would like to learn about the teachers' success and/or problems with implementing the curriculum. Since I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the day of May 31,1990 for visiting your school. I would very much appreciate it if you would arrange the times for the interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Terry Keefe.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Mr. W. Ulrich
Principal,
J. Macpherson School
Yellowknife, NT
X1A 2L8.

Dear Mr. Ulrich:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview one teacher from each grade and yourself individually, and all or as many of the teachers in your school as is possible as a group. I would like to interview teachers who have had success with the curriculum, likewise those who have experienced problems with it or for some reason have been unable to implement it. I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, so I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the day of June 1, 1990 for visiting your school. I would very much appreciate it if you would confirm the times for the individual and group interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Terry Keefe.

Ms. C. Goldsmith
Principal,
Chief Jimmy Bruneau School
Rae Edzo, NT.
X0E 0C0.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Dear Ms. Goldsmith:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview one teacher from each grade and yourself individually, and all or as many of the teachers in your school as is possible as a group. I would like to interview teachers who have had success with the curriculum, likewise those who have experienced problems with it or for some reason have been unable to implement it. I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, so I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the days of June 4 & 5, 1990 for visiting your school. I would very much appreciate it if you would arrange the times for the individual and group interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Jim Martin.

Mr. Lidbury
Principal,
Mildred Hall School
Yellowknife, NT.
X1A 2R3.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Dear Mr. Lidbury:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview one teacher from each grade and yourself individually, and all or as many of the teachers in your school as is possible as a group. I would like to interview teachers who have had success with the curriculum, likewise those who have experienced problems with it or for some reason have been unable to implement it. I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, so I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the day of June 7, 1990 for visiting your school. I would very much appreciate it if you would arrange the times for the individual and group interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Terry Keefe.

Ms. Cora Sulz
Principal,
J. H. Sisson School
Yellowknife, NT.
X1A 2L8.

53 Agassiz Drive
Winnipeg, Mb.
R3T 2K9.

May 15, 1990.

Dear Ms. Sulz:

Further to our telephone conversation, I would like to thank you for agreeing to participate in my research project, the topic of which is "the Implementation Status of the Northwest Territories School Health Curriculum". The research is in partial fulfilment of the requirements for a master's of education degree in health education at the University of Manitoba and is being conducted under the supervision of Dr. Dexter Harvey of the Faculty of Education, telephone (204) 474-9013.

To reiterate our earlier discussion, I propose to interview one teacher from each grade and yourself individually, and all or as many of the teachers in your school as is possible as a group. I would like to interview teachers who have had success with the curriculum, likewise those who have experienced problems with it or for some reason have been unable to implement it. I am primarily interested in obtaining the thoughts, opinions and observations of your staff and yourself regarding teaching health, so I am hoping that you will feel free to add comments and not limit your responses to my questions. The questions I will be asking relate to the factors associated with the implementation of any curriculum but the focus will be on the NWT School Health Curriculum. The following are examples of the questions:

i) How long have you been teaching health?
ii) Do you use the NWT School Health Curriculum?
iii) What barriers or obstacles to teaching health have you experienced?

I have set aside the day of June 6, 1990 for visiting your school. I would very much appreciate it if you would arrange the times for the individual and group interviews prior to my visit. Enclosed is a copy of the consent form which each participant will be required to sign. Please circulate my letter to all of the teachers in your school in order that they may become familiar with the study. Please phone me at (204) 269-0680 should you require additional information.

I look forward to our meeting.

Sincerely

Sharon Kirwan.

c.c. Mr. Terry Keefe.

COPY TO STAFF
07·03

Northwest Territories Education

Appendix 13

DIRECTOR
BAFFIN DIVISIONAL BOARD OF EDUCATION

SUPERINTENDENTS
- YELLOWKNIFE #1
- YELLOWKNIFE #2
- YELLOWKNIFE #4
- KEEWATIN REGION
- KITIKMEOT REGION
- FORT SMITH AREA
- INUVIK REGION
- FORT SIMPSON AREA
- DOGRIB AREA

Time Allocation - School Programs

The Education Act requires schools to be in session for a minimum of one hundred and ninety days. A school day shall consist of a minimum of five hours for grades one to six and five and one-quarter hours for grades seven to twelve. On that basis, the following time allocations are to be followed in our schools for grades one to nine.

Language Arts:	210 hours per year
Mathematics:	180 hours per year
Science:	90 hours per year
Social Studies:	90 hours per year
Physical Education:	90 hours per year
Health Education:	60 hours per year
Practical Arts:	60 hours per year
Fine Arts:	60 hours per year
Another Language:	60 hours per year
TOTAL:	900 hours per year

.../2

The balance of the school hours (50 hours for grades one to six and 97.5 hours for grades seven to nine) may be distributed by the principal in consultation with the LEA and approval of the Superintendent of Education.

Joseph L. Handley
Deputy Minister

cc: E. Colbourne