NURSING EDUCATION IN THE NORTH

IDENTIFICATION OF CONTENT AND STRUCTURE REQUIREMENTS FOR A NURSING DIPLOMA PROGRAM IN THE YUKON TERRITORY AND THE NORTHWEST TERRITORIES

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Abstract

Identification of Content and Structure Requirements for a Nursing Diploma Program in the Yukon Territory and the Northwest Territories

The purpose of this study was to identify the content and structure for a nursing diploma program which would be suited to the needs of the Yukon and the Northwest Territories; to evaluate the similarity between and within the territories; and to identify any existing programs which would be readily adaptable to include the identified content and structure. The research was conducted in two phases. Phase One was the development of a questionnaire based on information on selected existing nursing curricula. Phase Two was the collection and analysis of the data.

Questionnaires were distributed to nurses, employers of nurses, and representative community members in the Yukon and Northwest Territories. Collection of data in the communities was accomplished with the assistance of local "data gatherers" who distributed the questionnaires and assisted respondents where necessary. Questionnaires were mailed to nurses and employers of nurses. There was a total of 827 questionnaires sent out and 428 usable ones returned. The overall return rate of the questionnaires was 51.5%. There was similarity in responses amongst the groups and between the geographical regions.

Analysis of the data resulted in a set of criteria for evaluating nursing education programs. There were four dominant themes for nursing education which emerged - community focus; interpersonal relations; acute/advanced nursing; and high standards for nursing education with articulation with a baccalaureate program, and commitment to lifelong learning.

The criteria were used to assess the outlines received from existing nursing programs to determine which program most closely matched the established criteria.

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The participation of community residents, nurses, and employers of nurses was critical to this research. Their responses to the questionnaires were beyond my expectations and greatly appreciated. The detailed responses to the questions provided a depth to the data not usually achieved in such a study. For this I wish to particularly thank them.

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Principal Researcher

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BACKGROUND TO THE STUDY

The Yukon Territory and the Northwest Territories encompass the northernmost areas of Canada. There are approximately 30,000 residents of the Yukon, 70% of whom live in Whitehorse, with the remainder scattered throughout the Territory in 19 communities. Aboriginal residents, who are from a single major aboriginal group, comprise approximately 20% of the population (Bureau of Statistics, Government of Yukon Territory, 1990). English is the language used by most persons. Nevertheless, there are seven native languages spoken in various parts of the Territory, indicative of the seven First Nation cultural groups of the Territory (McClellan, 1987).

In the Northwest Territories, there are approximately 53,000 people living in 65 communities, with the largest number in Yellowknife which has a population of 13,700 (Bureau of Statistics, Government of the Northwest Territories, 1991). Almost 2/3 of the residents of the Territories are aboriginal or Metis. There are two major aboriginal groups in the Northwest Territories - the Inuit and the Dene - which differ considerably in language and culture (Bureau of Statistics, Government of the Northwest Territories, 1989) and which may be further broken into local groups according to dialect and culture. The three major languages spoken in the Northwest Territories are Inuktitut, Dene, and English.

The provision of health and illness care in both territories has historically been organized by the Federal Government. Although some attention to local needs was given, generally it was more efficient to develop one system to meet the requirements for all the regions under the Federal Government's jurisdiction.

Medical Services Branch continues to operate and staff almost all of the health and illness care facilities in the Yukon, although devolution of this service to the Yukon Territorial Government remains under negotiation. At the present time there are nine Health Centres, with three Health Stations associated with other facilities; two Cottage Hospitals; three Nursing Stations; two Health Centres which are primarily concerned with community health nursing; and one major hospital of 75 beds in Whitehorse which acts as the referral centre for the other communities of the Territory.

In 1988, the responsibility for the health services of the Northwest Territories was transferred to the Government of the Northwest Territories from the Federal Government (Weller, 1990). Health Services, in five of the six regions, are administered by Regional Health Boards, which include representation from each community in the region. In the Mackenzie region, the Health Board has yet to be established. There are 43 Health Centres throughout the Territories to assist in health and illness care as well as five smaller hospitals and the 137 bed hospital in Yellowknife which also acts as a referral centre.

Due to the absence of nursing programs in the territories, nurses in the Yukon Territory and the Northwest Territories have been recruited from other regions of Canada and abroad. Recruitment has remained a problem over the years. Although there is at present a surplus of available nurses in the more southern parts of Canada due to the changes in provision of health and illness care, reliance on a supply of nurses from southern nursing schools and universities presents a problem since a shortage of nurses in southern areas bodes ill for the north. Retention of nurses has continued to be of concern due to the disruption caused to communities when nurses remain only a short period of time. Knowledge of the community and the residents requires time and continuity in care may be compromised due to the differing education and experience of the nurses coming to the community.

Yukon College and Arctic College have each investigated the feasibility of a diploma nursing program. In both cases it was determined that such a program would be feasible and desirable. The Yukon College survey was directed to employers and potential students. Questionnaires were sent to present and potential employers including all First Nation Councils and the Council for Yukon Indians; students on the wait list for the Certified Nursing Assistant course; Certified Nursing Assistants employed in the Yukon; Community Health Representatives employed in the Yukon; and persons who had indicated interest in a nursing program. Ads were placed in local newspapers, T.V., and community health facilities to encourage other interested persons to request and complete a questionnaire. Major conclusions of the Yukon College report (Hoyt, 1990) indicated that a nursing program must reflect the specific cultural and situational needs of the north; that entry must be flexible as prospective students have a variety of educational and experiential

preparation; that it must provide support services as necessary and be adaptable to the needs of the prospective students, many of whom will be juggling family and other responsibilities in addition to nursing studies; and that it must be articulated with a baccalaureate program. Support for a program was received from potential employers, as well as members of the aboriginal community and other interested persons.

A study in the Northwest Territories was conducted in 1978 by Margaret Steed. While she recommended that a nursing program at that time would be premature, she did suggest that attention be given to developing the necessary structures to enable the provision of a program which would meet the needs of the communities and the students. In view of the changes in the Northwest Territories since 1978, an advisory committee at Arctic College has determined that the structures are in place and that the most effective plan is to develop a comprehensive health career program which would develop northern expertise in the north and which would include the education of nurses. A proposal for a comprehensive Health Programs Career Path has been prepared by Arctic College (Arctic College, undated). The intent of this Health Programs Career Path is to provide the opportunity for persons entering at any point in the health field to have the option of advancing by building on previous education and experience. The Government of the Northwest Territories announced support of a nursing program in the Northwest Territories in March 1993 with an access year to begin in September of 1993.

STATEMENT OF THE PROBLEM

The feasibility of a nursing education program has been determined for both the Yukon and Northwest Territories. What was lacking, however, was a knowledge of the specific content and structure of a nursing program which will prepare nurses for the unique and varied settings in which they will be employed.

The purpose of this study was to identify the content and structure for a nursing diploma program which would be suited to the needs of the Yukon and the Northwest Territories; to evaluate the similarity between and within the territories; and to identify any existing programs which would be readily adaptable to include the identified content and structure.

RESEARCH QUESTIONS

1. What are the structure and content components which are identified by nurses, employers, and residents of the Yukon and Northwest Territories as being important in the design of a nursing program?

2. How similar are components identified in the Yukon Territory and in the Northwest Territories?

3. Is there an existing nursing program which includes the identified components or which could be adapted to incorporate the identified components?

LITERATURE REVIEW

There is no literature available on the specific, appropriate content or structure of nursing programs for the northern regions, nor is there specific information available on the effect of the changes underway in health care on the educational preparation of nurses.

Canadian Health Care System

The changes in health and illness care are being propelled primarily by two factors - funding and the concept of Primary Health Care. As a prelude to the discussion, a short review of the founding and the funding of our system is in order. Insurance or prepaid services for medical care have been around for a long time, dating back to 1665 in Montreal (Baumgart, 1992, p. 28) but not available to all. The Hospital and Diagnostic Services Act of 1957 and the Medical Care Bill passed by the federal government in 1966 and implemented in 1968 were the foundation of our current system. There were four criteria for services under the Medical Care Bill - comprehensive, universal, portable, and publicly administered. Costs of operating the system were shared jointly (50 - 50) by the federal and provincial governments until 1977 when the increased costs of hospital and medical treatment resulted in the federal government introducing block funding. Further changes were made in 1982 and in 1984 when the Canada Health Act was passed, and most recently Bill C-69 The Expenditures Restraint Act of 1991.

The system, which has developed, has been directed at the treatment of illness and the provision of services by physicians as the "gate -keepers" to the system. Such an "illness" perspective has not been inexpensive as the focus of research and treatment have been on pathology and the development of new treatments. The cost of illness care has become even more evident in the past two years. The federal government has made changes to the method of transfer payments to the provinces for health care and largely undermined the principles upon which our system of health and illness care was founded. As a response to the federal withdrawal from funding, several provincial governments, including British Columbia, Ontario and Saskatchewan, have indicated clearly that they plan to decrease hospital beds and utilize more community care. This has major implications for the preparation of nurses. Furthermore, the recognition of the cost of our present illness-oriented system in both dollar and human terms has compelled many to apprehend the importance of health promotion, illness prevention, and primary health care.

Emergence of New Roles for Nurses

Primary health care is a concept which has been adopted internationally in an attempt to meet the World Health Organization's goal of "health for all by the year 2000". In setting this goal at the Alma-Ata conference in 1978, all governments and all countries were challenged to incorporate primary health care in the development of their health services. The emergence of primary health care is not so much a new development as revival of older ways of attending to health and illness. Primary health care has been described by the World Health Organization in 1978 as "essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self reliance and self determination" (Splane & Splane, 1988).

Primary health care is much more than a philosophy, ..."it is a practical strategy that insists on local initiatives in which consumers of health services become active partners in the provision of those services rather than passive recipients." (Arctic College, undated, p.

2). The desire of consumers to be involved in their own health care and to move from a medical model to looking at health in a more comprehensive manner, including the investigation of aboriginal and other traditional health practices was confirmed by participants at the "Health Research North of 60^0 Workshop" in 1989. The opportunity to learn from one another and the desire to direct their own health care as active participants rather than passive recipients was seen as crucial to the improvement of health in the north and expressed throughout the workshop (Government of the Northwest Territories & Science Institute of the Northwest Territories, 1989).

The Yukon Health Act, proclaimed in 1990 provides for a major role by communities in the development and provision of their health and illness care. The principles upon which the Act is based are consistent with those of primary health care. The principles of primary health care are also supported in the Northwest Territories. The health and illness care systems of both the Yukon and Northwest Territories are undergoing changes as they respond to the challenges of the 1990's and beyond. The very nature of the systems, and consequently, the nature of the work being done by nurses, is changing.

The Canadian Nurses Association (CNA) has been advocating changes in the current system to allow more effective utilization of the knowledge and skills of registered nurses. The move to baccalaureate education for nurses as the entry to practice was in part a response to the challenge to have all nurses prepared for health care as well as illness care. The CNA 1980 submission to the Hall Commission, entitled "Putting 'Health' into Health Care", outlined the appropriate role for nurses within the Canadian system and encouraged a Primary Health Care approach. Although the report was well received by Justice Emmett Hall who encouraged further study and consideration of the recommendations (Mussallem, 1992), there has been little action to implement the recommendations. The potential for nurses' contribution was cited not only in the CNA submission of 1980, but also in numerous reports prior to 1980 (Boudreau, 1972; Imai, 1974; Kergin, 1970; Selby, 1974).

In April 1993 Mary Pat Skene (1993), President of the Alberta Association of Registered Nurses, advised the Annual Meeting that the role of nurses is changing and nurses must be prepared to develop more efficient and effective health care. She stated that

"Eighty percent of Alberta's registered nurses now work within institutions. In the future, 40% of registered nurses would work within institutions and remaining 60% would work within the community" (p. 12). Such a shift in the location of nurses' work may not be far in the future and we must give careful thought to these trends in the planning of nursing education.

Primary health care, provided by nurses, has been the mainstay of many communities in the north. The specifics of the work in primary health care vary according to the setting in which nurses are practising. In some isolated communities, nurses are the sole provider of health and illness care, while in other settings there are other professionals such as Physiotherapists, Laboratory and X-ray Technicians, Physicians, and others who form part of the health and illness care team. As the work of nurses varies, so too the knowledge and skills required of nurses vary from setting to setting. But there is a common basis in their practice of nursing and this must not be overlooked in the planning of nursing education which is the key to preparing nurses for the roles.which they will assume over their career in nursing.

Education of Nurses

Nursing education has a long and varied history which is useful for understanding the present situation and planning for nursing education in the north. Early education of nurses was largely informal through on-the-job training and often by persons attached to religious orders who were in care-giving roles. Florence Nightingale recognized the need for formal education of nurses and founded the first nursing school in 1860. The school was affiliated with a hospital and this became the model for the establishment of nursing schools throughout Europe and North America. Unfortunately, the schools became so integral to the hospital that the education of the nursing students was secondary to the staffing of the hospital. Following the Weir Report of 1932 (a survey of standards of education in nursing schools in Canada) the Canadian Nurses Association developed a national curriculum guide in 1936 (Kerr, 1991). There was much resistance to a change in nursing education from a hospital-based apprenticeship training to an education organized and financed similar to the education of other professions. By the early 1970's, however,

many nurses were being educated in colleges. These diploma programs are, for the most part, integrating with universities in the move to baccalaureate education for nurses as the standard early in the next century.

University education for nurses is not a recent happening. There have been nursing departments in universities for many years. The University of British Columbia established a department of nursing in 1919, only four years after the founding of the university itself (Kerr, 1991). The generosity of Canadian nurses and their financial support of the nursing program at McGill University prevented its demise in 1929 due to a general shortage of funds at that university (Kerr, 1991). In more recent years universities have offered post-basic degree programs for nurses who have completed a diploma nursing program.

The Canadian Nurses Association adopted "E P 2000", (a baccalaureate in nursing as the minimum entry to the profession by the year 2000) in 1982. This standard is in response to both existing and potential expectations for nurses. For some years now there have been discussions of the role of the nurse as an entry point to our system of health and illness care and particularly the role of the nurse in promotion of health and primary health care. The Canadian Nurses Association, in their report to the Hall Commission (Mussallem, 1992) noted that baccalaureate education for nurses would enable them to assume the new roles as they developed.

In addition to the organization of education, there is also the content to be considered. In response to the rapid changes in our health and illness care system, it is imperative that nurses be prepared to "change with the times". This assumes that learning will continue to occur throughout the nurse's career and that the basic education has prepared the nurse for continued learning.

There has been an emphasis on "science" in nursing education since the 1940's and early 1950's and nurses, following the lead of society in general, attempted to establish nursing as a professional discipline based on the yardstick of the day - science. The result has been a pursuit of "empirical" knowledge through research directed by scientific principles. Recently, there has been a move to balance our fascination with "science" and scientific inquiry with other more traditional "ways of knowing" or inquiry including philosophical inquiry.

Carper examined patterns of knowing in nursing. She identified four patterns : empirics, the science of nursing; ethics, the moral component; personal knowledge; and esthetics, the art of nursing. (1992, p. 76 - 77). Bajnok (1992) builds on the work of Carper when she identifies the necessary components for nursing education.

> Professional nursing requires a sound basis in nursing science, in other related sciences, and in the humanities. In addition, professional nursing requires communication skills in all forms of expression: written, verbal, and nonverbal. Problem solving, the development of an inquiring mind, and the need for accountability to oneself and to society are also integral goals of liberal-professional education for nurses. Critical thinking and problem-solving skills, in turn must complement a deep and tolerant understanding of humanity if a nurse is to achieve one of nursing's most important roles: the therapeutic or helping relationship that can make an important difference in the health of the individual person or family. (Bajnok, 1992, p. 412)

Bajnok's view of nursing contains three essential elements. The practice of nursing flows out of knowledge and skills in the academic (broadly defined) and social realms. These elements become the basis for planning the content and structure of nursing programs.

Conceptual Model for Nursing Education

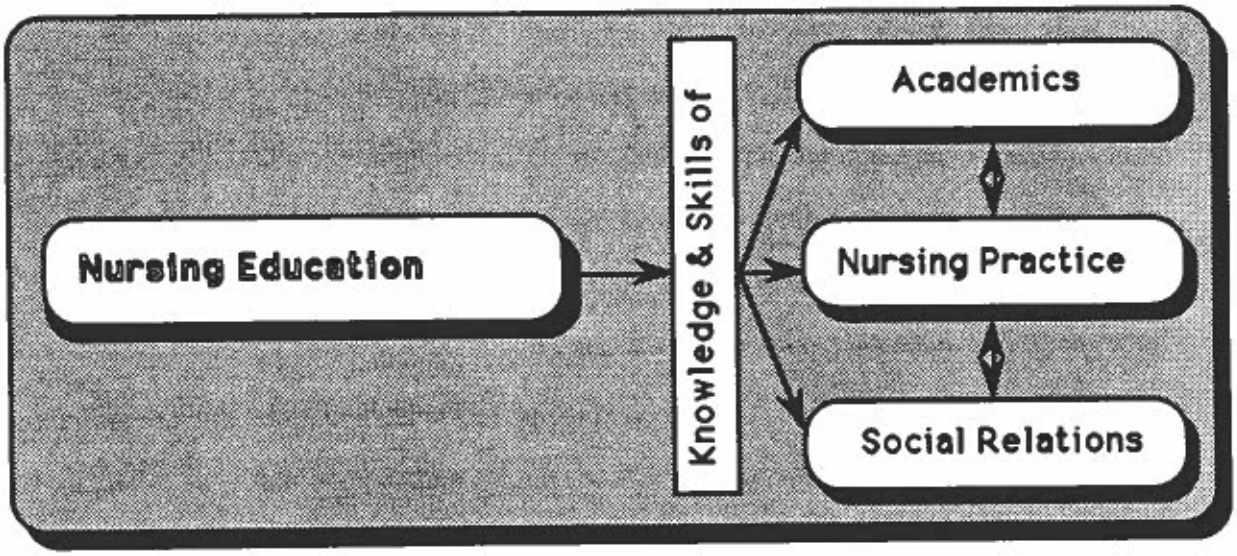
In research of this nature where the responses are not closely circumscribed by limitations in breadth and scope, the presentation of the data in a useful form is greatly enhanced by the use of a model to organize the data. The model ought to explain or categorize the data received and usher the reader through the data to a logical outcome. The model for this research is based upon information on the education of nurses, the health and illness care system, the practice of nursing as it currently exists, and upon the responses received.

In concurrence with Bajnok's view, the model has three major components or elements - academics, social relations, and nursing practice. Each of these are further

subdivided to permit more refined classification of the contents. Academics includes the arts and humanities, sciences and maths, as well as other subject matter which does not fall in these groups, and a section on program type or delivery information which is labelled "Program Directives". The social relations component includes both personal and interpersonal relationships and interactions. Nursing practice contains some content which is broad and applicable to all practice areas, and content which is directed more to either institutional (one to one nursing) or to commonweal (one to many nursing). While these categories may appear to be discrete, there is overlap in all components and particularly within components. In the model (see Figure 1) there are arrows which link the three components. These designate the interactions amongst the components.

Figure 1

Model of Nursing Education



STUDY DESIGN AND METHODS

Introduction

This cross-sectional survey was conducted in two phases under the direction of the Principal Researcher. A Co-Researcher at Yukon College and at Arctic College assisted the Principal Researcher. The first phase consisted of evaluation of existing nursing curricula to identify similarities and differences in content and structure. This information was then incorporated into a questionnaire, evaluated by experts in nursing education for content

validity, and pilot tested on a sample group similar in composition to the research sample to establish face validity.

In the second phase, the questionnaire was used to collect information from a convenience sample of nurses employed in nursing in the territories, employers of nurses in the territories, and a representative sample of residents of the Yukon and Northwest Territories. The results were assessed to determine the similarity within and between the Territories and generated the criteria to evaluate existing nursing programs.

In order to ensure relevance of the data, community residents and the community colleges were involved. This is also in keeping with the desire expressed by participants of the Health Research Workshop North of 60^0 to be involved in research and planning related to health care.

A limitation of this study is ecological validity or the extent to which historical or current events may influence responses, in any particular community. By utilizing a sample from several communities, it was felt that the interaction of history was minimized. A second consideration in cross-sectional survey designs is the extent to which one may generalize the findings. The results of this survey are applicable to those communities in the Yukon and Northwest Territories which were surveyed and to those which are similar to the surveyed communities.

Phase One

Instrument Development

The first phase consisted of evaluation of existing nursing curricula to identify similarities and differences in content and structure; development of a questionnaire; validation of questionnaire content; and pilot testing of the questionnaire.

The first step in the development of the questionnaire was an analysis of the content and structure of curricula from existing Canadian nursing programs which would be available to Arctic College and Yukon College for either purchase or brokering, which are within a reasonable proximity for the necessary supervisory visits of a brokered program, and which are flexible to incorporate northern adaptations. Eight schools of nursing sent copies of their curriculum outline and other pertinent materials. This information was then

analysed to determine which courses or subject areas were common to all programs and which courses varied from program to program. A course was considered to vary if even one program did not incorporate that course or subject into its program.

The information was then incorporated into a questionnaire (Appendix A) which was evaluated by experts in nursing education for content validity, and pilot tested on a sample group similar in composition to the research sample to establish face validity.

The similar items were listed in the first part of the questionnaire - Section One - for the information of research participants. Space was left for comments by participants.

The nineteen (19) items which differed were listed in Section Two of the questionnaire. Respondents were asked to assess the importance of each item and to number them in order of importance with #1 being the most important. The purpose of this section was to discriminate between the available nursing programs and/or available courses and to enable selection of the program(s) which most nearly match the identified components for a nursing program in the Yukon and Northwest Territories.

The third section of the questionnaire consisted of a qualitative section to augment the quantitative data and allowed respondents to identify content items which did not appear in the first two sections. It was expected that respondents would identify items which are not generally present in nursing courses, but which are important in communities in the Yukon and Northwest Territories.

Section four contained four subsections. The first listed suggestions for program delivery and respondents were asked to rank the seven choices. In the second part, respondents were asked to indicate which months students would prefer to study, with space for further comments on either program delivery or months for study. Suggestions for persons whom the respondent felt would be an asset in teaching in the nursing program were solicited in the third section; while the final section requested further suggestions and comments on supports for nursing students.

Section five in the questionnaire requested the respondent to circle the "age", "gender" and "ethnicity" categories which applied to him or her.

Further information was requested of nurses and employers of nurses in a sixth section to their questionnaires. Nurses were asked to indicate whether their initial nursing

education had been diploma or baccalaureate; further education taken; years of nursing experience; type of employment position; and length of time in present position. Employers were asked for information on the type of setting in which they employ nurses and the ratio of diploma/baccalaureate nurses they employ.

Content validity for the questionnaire was established by five experts in nursing education and research. Their comments and suggestions were incorporated in the final revision of the questionnaire.

Face validity was determined by piloting the questionnaire on a group of five persons using the same selection criteria as were used for the other communities. The pilot was conducted in Teslin on December 9, 1992. Comments from the pilot were used in the final revision of the questionnaire and in the materials for the training of the data gatherers.

Phase Two

Sample

The research was undertaken in the Yukon and Northwest Territories. The sample consisted of three categories of respondents, nurses, employers of nurses and community residents. Nurses who were employed in nursing in the Yukon or Northwest Territories communities were sent a copy of the questionnaire, as were nurses in hospitals with the exception of the Whitehorse and Stanton Yellowknife hospitals where representative samples of 30 nurses in each hospital were selected with the assistance of administrative staff. The second group was comprised of all available employers of nurses in the Yukon and Northwest Territories. The third group was representative of residents in selected communities. The communities were chosen using the criteria of: a) having a resident employee or employees at the local community college campus/learning centre of Arctic College who was able to assist in the data collection for the Northwest Territories and in the Yukon, having a Community Health Representative who was willing to undertake the data collection; and b) representative on the basis of location or region and population of communities in that region (Appendix B). Respondents were chosen to obtain a balance between aboriginal and non-aboriginal persons; persons over 45 years of age, and those between 16 and 45; and a balance between the genders. The stratified sample was based on

the latest available Canada Census Reports of 1986 supplemented where possible by recent data from the Yukon and Northwest Territories Governments. The stratification resulted in a grid which defined age, gender and aboriginal-non-aboriginal characteristics of respondents for each of the respondents in a community. In addition, a further criteria requiring at least two years residency in the community was implemented to ensure relevance of the data. The data gatherers were asked to identify persons in their community who fulfilled these criteria. In the larger centres, assistance was sought from band councils and other local groups in the identification of potential respondents. In Whitehorse, the telephone directory was utilized to call randomly selected numbers and ask the person who answered whether he/she would participate. If willing to participate, his/her characteristics were matched to the grid. Calls were placed until all the required respondents were selected. In one area of Whitehorse, telephone coverage is not consistent, so a data gatherer was recruited to collect information from this area using the approach for the smaller communities. A similar system was used in Yellowknife where the telephone directory was employed to enlist respondents. As in Whitehorse, there is an area with inconsistent telephone coverage so data gatherers used the same approach as in the smaller communities for this area.

Clear definition of the characteristics for the sample was designed to avoid the potential of bias which might occur should a snowballing technique be used or should data gatherers be asked only to have "x" number of persons complete the questionnaire.

Data Collection

Data were collected for the community respondents by volunteer data gatherers. In the Northwest Territories these data gatherers were adult educators from the local campus of Arctic College, with the exception of three communities. In one community a student at the campus was interested in the research and gathered the data as part of an assignment under the supervision of the Adult Educator; in another community, the Adult Educator was very busy so a local person, fluent in both English and the local dialect, was hired to gather the data under the supervision of the Adult Educator. In the third community, Yellowknife, three persons were hired to gather the data under the supervision of the Co-Researcher.

In the Yukon Territory, the Community Health Representatives in the selected rural communities volunteered to gather the data. It is important to note that the CHRs were all on a training course at the time of the data collection and were alternating time between their communities and Whitehorse. In Whitehorse, volunteers from the staff at Yukon College were responsible for the data gathering.

Training sessions prepared data gatherers for the identification of respondents and in the procedures for assisting respondents to complete their questionnaires (Appendix B). Materials were sent to each data gatherer ahead of the training session to enable them to be familiar with the requirements. Only one data gatherer had not received the materials prior to the training session, due to slow postal service, so materials were faxed to him.

The data gatherers were asked to identify respondents and to collect the data in their communities according to the protocols. The data gatherers returned the completed questionnaires in the prepaid, addressed envelopes to the principal researcher.

In order to facilitate the conduct of the research, the questionnaire was translated into the Inuktitut language. Translators were either unavailable or felt that language would not be a major problem for the other languages.

Questionnaires were sent directly to selected nurses and to employers of nurses. They were requested to return their questionnaires in the prepaid addressed envelope provided.

Data collection began in late February of 1993 and was to be completed by mid-March. Due to mail delays and other uncontrollable events, including illness, collection continued until April 26, 1993. Questionnaires received prior to April 26 were included in the analysis.

Data Analysis

Data were analysed in several ways. It was necessary to separate the data of the Yukon Territory communities from that of the Northwest Territories communities in order to determine whether a difference existed between the two Territories. In addition, it was necessary to evaluate whether any distinctive patterns existed within the Northwest Territories on the basis of community location.

The qualitative material and comments were transcribed and sorted by themes or suggestion. The occurrences of each theme or suggestion were then counted to determine frequencies. Some qualitative comments were reported as descriptions to enhance the analysis and provide breadth to the report. Data from Section One and Three were transcribed and analysed for patterns and frequency of specific topics or suggestions. The frequencies were noted for the components of the model developed for this research. A Chi Square One Group analysis of the frequency of comments for the twelve required courses was completed for Section One. Section Two was analysed using Spearman Rank Correlation Coefficient to assess similarities and a Chi Square analysis of the frequency of choices in positions 1 to 3. Section Four had four parts. Part A, ranking of program suggestions, was analysed using Spearman Rank Correlation Coefficient; Parts B, C, and D were analysed qualitatively for frequency of responses.

Ethical Considerations

Participation in the research was voluntary. Names were not used on the questionnaires, although a designation as to group, and community was included in a coding on the questionnaires. Names were not used in the coding of the data or in the reporting of the results. Neither the lists of respondents nor the raw data were available to any persons other than those directly involved in the research. Questionnaires will be destroyed upon completion of the research. Therefore, it is felt that ethical considerations have been met with the voluntary participation, the protection of sensitive material throughout the research, and the destruction of sensitive material upon completion of the research.

In addition, information from this research will be returned to the data gatherers and communities in the form of a report which will be circulated to interested parties and made public and available through the college campuses and learning centres.

RESULTS

There was a total of 827 questionnaires sent out and 428 usable ones returned. The overall return rate of the questionnaires was 51.5%. Among the community respondents, two persons who initially agreed to participate, after careful consideration, felt they were not familiar enough with nursing to provide useful information, and returned the questionnaires with a note to this effect. One community questionnaire was completed in Inuktitut and not able to be translated prior to the April 26 deadline. Questionnaires from one community in the NWT were mailed at the end of March and have not been seen since; they are not included as returned questionnaires. One nurse's questionnaire was returned blank, and one was completed by a Certified Nursing Assistant and had to be discarded. Of the 827 questionnaires which were distributed, 428 or 51.7% were returned (see Table 1).

Of the 200 questionnaires sent to community residents in sixteen communities in the Northwest Territories, 175 or 87.5% were returned. In the Yukon, there were six communities chosen to participate. Questionnaires were received from three of those communities. There was a return of 68 of the anticipated 120 questionnaires or 56.7% of the questionnaires (see Table 1).

Questionnaires were sent to 318 nurses in the Northwest Territories as well as to 30 nurses at Stanton Yellowknife hospital. The return rate for NWT nurses was 97/318 (30.5%) and 16/30 (53.3%) at Stanton Yellowknife hospital. The overall return rate for nurses in the Northwest Territories was 113/348 (32.5%) (see Table 1).

In the Yukon, 30 questionnaires were sent to nurses at the Whitehorse General Hospital, and 95 to other nurses. There were 10/30 (33.3%) questionnaires returned from the Whitehorse General Hospital and 45/95 (47.4%) of the questionnaires returned from the other nurses. The overall rate of return for nurses in the Yukon was 55/125 (44%) (see Table 1).

The third group to be surveyed was employers of nurses. In the Northwest Territories twenty-five employers were sent questionnaires, as were nine employers in the Yukon. The return rate was 12/25 (48.0%) in the Northwest Territories and 5/9 (51.5%)

in the Yukon (see Table 1) Due to the low numbers of employers, it was not always possible to separate the employers as a distinct group for statistical analysis. Their responses are included in the general group and in the qualitative analysis.

Table 1

Return Rate of Questionnaires - Number & Rate by Group & Area

Group	Area	# Sent	# returned	Return Rate
Communities	NWT	200	175	87.5%
	Yukon	120	68	56.7%
Nurses	Stanton Yellowknife Hosp.	30	16	53.3%
	Other NWT Nurses	318	97	30.5%
	Total NWT Nurses	348	113	32.5%
	Whitehorse General Hosp.	30	10	33.3%
	Other Yukon Nurses	95	45	47.4%
	Total Yukon Nurses	125	55	44.0%
Employers	NWT	25	12	48.0%
	Yukon	9	5	51.5%
Total		**827**	**428**	**51.7%**

Section One - Required Courses

Although a response to question one was optional, many respondents made comments on the required courses, on other courses they felt should be required, and on the type of program which should be offered in the north. Many of the topics which came up in this section surfaced later in the comments of respondents to Sections Three and Four. Table 2 and figure 2 indicate the frequency of comments of the required courses. Communication was the subject mentioned much more frequently than any other (see Figure 2). Professionalism, ethics, psychology, pharmacology, and anatomy and physiology were mentioned at least 25 times.

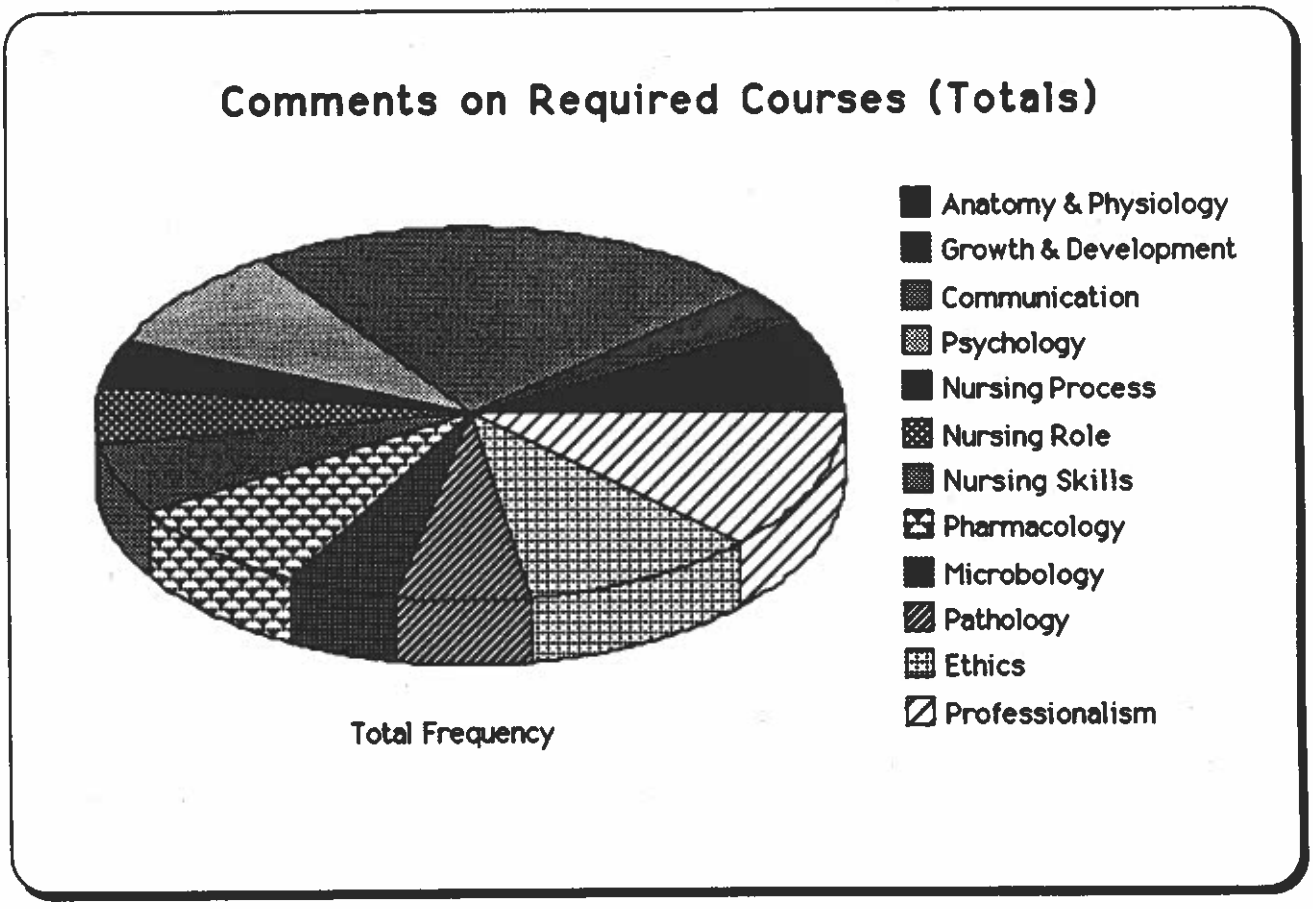
Table 2

Comments on Section One: Required Courses - Frequency by Area

Course Suggestions (Section One)	Category of Respondents: Eastern NWT	Western NWT	Yukon	Nurses NWT	Nurses Yukon	Empl. NWT	Empl. Yukon	Total
Anatomy & Physiology	10	8		5	2			25
Growth & Development	4		1	2	1	1		9
Communication	15	17	9	19	9	1	1	71
Psychology	5	7	6	1	10			29
Nursing Process	1	3	3	2	4			13
Nursing Role	6	4	1	3	1			15
Nursing Skills	5	3		6	5			19
Pharmacology	9	4	1	7	5			26
Microbiology	4	2		7	1	1		15
Pathology	4	5		6	3			18
Ethics	5	11	3	7	6			32
Professionalism	5	12	4	7	10			38

Figure 2

Comments on Required Courses - Frequency



The categories of "Anatomy" and "Physiology" were collapsed into one because of the tendency of respondents to consider them as one. A Chi square analysis of the frequency of comment for the twelve required courses was carried out to assess significance in the responses and resulted in a χ^2 (11, $\underline{N}$ = 310) = 117.215, $\underline{p}$. = .0001. These results are significant and indicate that all the courses were not commented on with equivalent frequency. Upon inspection, communication was noted to be greater than one standard deviation above the mean, while growth and development was more than one standard deviation below the mean.

Table 3 presents the frequency of comment of the other topics or suggestions made in Section One. As can be seen, cross cultural issues were frequently noted. High standards of education, community health, outpost nursing skills, physical assessment, speaking local language, and knowledge of substance abuse were more likely to be mentioned than the remaining suggestions.

Table 3

Comments on Section One: Additional Courses - Frequency by Area

	Category of Respondents							
Additional Course Suggestions (Section 1)	Eastern NWT	Western NWT	Yukon Comm.	Nurses NWT	Nurses Yukon	Empl. NWT	Empl. Yukon	Total
Ambulance			1					1
Anthropology				2	1			3
Art of Nursing				1	1			2
Canadian Health Care System					1			1
Community Development	1			2	3			6
Community Health	1		1	8	1			11
Community Practica				1				1
Continuing Education				2				2
Crisis Intervention					1			1
Critical Thinking Skills				1				1
Cross Cultural	3	9	3	17	8	1	2	43
Danger of New Pollutants			1					1
Degree with Advanced Skills						1		1
Economics			1		1			2
Effects of Climate on Health				1				1

Additional Course Suggestions (Section 1)	Category of Respondents: Eastern NWT	Western NWT	Yukon Comm.	Nurses NWT	Nurses Yukon	Empl. NWT	Empl. Yukon	Total
English	1		1					2
Geriatrics	1		1		1			3
Health Assessment				3				3
Health Promotion				4				4
Health Teaching				3				3
High Standards of Education	2	2	1	6	2	1		14
History of Canadian North			1		1			2
Humanities							1	1
Legal Issues					1			1
Medicine/Surgery				3		1		4
Mental Health & Illness			1	1				2
Mgmt.& Organizational Skills					2			2
Native Studies			3	1				4
Nursing History				1				1
Nursing Power					3			3
Nutrition	4		1	1				6
Obstetrics				7		1		8
Outpost Nursing Skills	1			8	1			10
Paediatrics				1		1		2
Personal/Prof. Development				3	1			4
Philosophy			1					1
Physical Assessment				12	1			13
Prevention	1		1	3				5
Primary Health Care	1			2	1			4
Sciences				2	1			3
Sociology			1	2	2		1	6
Speaking Local Language	7	4						11
Stress Mgmt & Responsibility	2			2	1			5
Substance Abuse	2		3	2	3			10
Systems Approach				2				2
Traditional Healing/Medicine	2	3	1		2			8
University Credit Courses				1	1			2

In Section One communication was mentioned frequently and was very broadly defined by respondents. A sub-category of communication (Local Language) was

separated out because of the specific mention of it. The category of local language includes suggestions that range from the requirement that nurses be fluent in the local language or dialect in order to be considered qualified to work in that community, to a knowledge of some of the language, to an understanding of how to work with interpreters to ensure accurate translation. In the Eastern NWT, there was quite an emphasis on the reading and writing fluency of the nurse in the local dialect or language.

Ethics and professionalism were also defined broadly and included areas related to the role of the nurse or the expected actions of the nurse within a community. Confidentiality was specifically mentioned a number of times and related to living in a small community and being sure the nurse would not breach confidentiality.

Cross cultural issues were mentioned frequently and respondents indicated that cross cultural matters were integral to the education of northern nurses. Community health, prevention, and health promotion were raised by nurses as were physical assessment, diagnosis, and treatment. Psychology with some specific reference to counselling skills was raised by a number of respondents. Nursing role, process, skills, and art; and the practice of nursing, were recurring themes. Pharmacology was raised more commonly by respondents in the eastern NWT.

Of particular interest to the development of a nursing program were the comments on the purpose and quality of a nursing program. Although less than ten percent of respondents touched on the necessity of a national or high standard of education for nurses, the comments were quite decided and some have been included in this report.

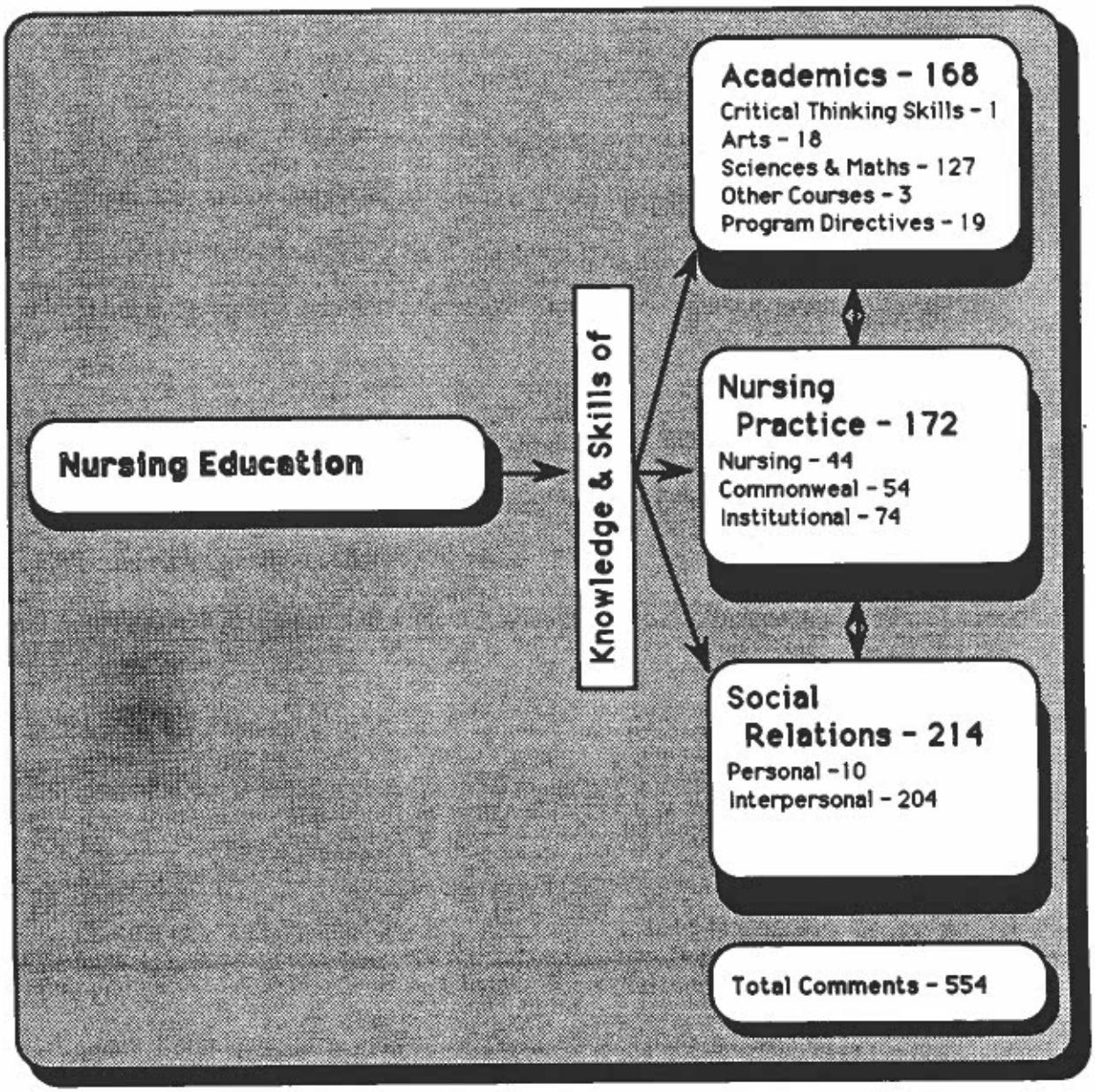
There were a total of twelve responses to Section One from the "Employers' group (eight in the NWT and four in the Yukon). The comments from this group are very useful, but trends in the responses were not evident due to the small numbers.

The data from Section One were organized using the model and the results are shown in Figure 3. The required courses are included in these numbers. The sciences and maths sub-component contains the six "sciences" from the required course list. The program directives includes comments on high standards. Nursing skills is included in the sub-component "Institutional" since most of the skills which were identified referred to the acute care role in nursing. Within the nursing sections, 34 of the 74 comments in

"Institutional" referred to areas of practice (eg. paediatrics, medical-surgical), while the other 40 comments were directed to general knowledge and skills such as assessment and treatment, physical assessment and so on. Similarly 21 of the 54 comments in "Commonweal" referred to specifics such as fitness and exercise or substance abuse, while 33 referred to general areas such as health promotion and primary health care. Within "Social Relations", ethics, professionalism, and communication" accounted for 138 of the 204 comments. As can be seen, there is a definite emphasis on interpersonal social relations and on sciences and maths.

Figure 3

Section One Comments - Number by Model Components



Comments of some respondents are included here to broaden the perspective of the numbers and charts. The quotes have been edited to ensure anonymity of the respondents.

These comments indicate the breadth of communication skills expected of nurses and provide an indication of the respondents' interest in the development of a nursing program.

> Communication - I feel this is a very <u>useful</u> tool in the nursing profession and too often ignored. Communicating with the ailing patient - listen there are usually clues there! Also excellent communication amongst health professionals makes for a unique concept of "continuity of care" both in the hospital and community.

> Courses like communication and the nursing role I think are very important. A lot of people are wary if not a little frightened when they are thrown into the medical world for whatever reason, and to have someone there who is compassionate and calm can help. It helps if they come to you as a person, not just the next patient on the list.

> Communication - this course should go beyond the nurse / patient / family arena. It should include the skills of a committee / board participation by the nurse. Nurses have an important role as leaders and participants in effecting change to the determinants of health in the community. They are an invaluable resource to any community, [one] that is presently severely underutilized but has the potential for making significant difference to the improvement of health on a more global scale.

There were a number of respondents who noted the importance of the "art" of nursing and requested an emphasis on this less easily defined area of nursing practice. A few respondents indicated they preferred a strong science base in a nursing program.

> Strong technical knowledge is important, but the stronger inter-relationship skills, gained through your proposed courses such as Development, Communication and Psychology are what make a good nurse to the patient.

> Skip courses on ethics and professionalism and stick to the sciences.

Many of the respondents expressed their pleasure in being offered an opportunity to share their knowledge and opinions on the education of nurses. One nurse expressed the prevailing attitude well in the following comment.

> I am encouraged by your efforts and wisdom in requesting input from the ...[people] ... of the north. I feel this will ultimately provide valuable information to you that will greatly enhance and enrich our nursing education.

There was support for a community-focused nursing program in this section as well as in other sections.

> Focus for all courses should be under the umbrella of COMMUNITY HEALTH!

Finally, there were some definite opinions expressed regarding the quality of the nursing program. There is a great deal expected of nurses and the comments reflected this in their call for high quality standards.

> We should not lose sight of the academic requirements to enter the nursing program. The more I observe "bridging programs" ... the stronger is my belief that when one enters the nursing program one should be prepared to tackle the coursework. There is not enough time to "nurture" students through the course. The taxpayer has had enough.

> I think all the entry requirements and criteria for completion etc. etc. must be strictly adhered to, to produce quality nurses. I know where aboriginal people are "pushed through" the program just so that the numbers of aboriginal graduates looks good on papers, in the papers ... These people who are "carried and passed" are no good to the community in which they serve nor are they good representatives of their profession. I hope this doesn't happen with the nursing program. [written by an aboriginal person]

> If the purpose of the program is to prepare NWT residents to be NWT nurses, then it should be a degree program. As well, there should be emphasis on the advanced nursing skills required by nurses in the community health centres.

Section Two - Optional Courses

In section two, respondents were asked to rank the nineteen courses according to the importance they attached to each course. This was not an easy exercise but most respondents persevered and completed the section. In some cases, respondents numbered only the top ten or top five choices, while some respondents reported that the ranking of courses was not possible since they felt all the courses were necessary. A sampling of comments is listed below.

> I realize that I've probably messed up your statistical counts, but I had a hard time numbering any of these courses less important, they are all important and should be included in your course. Even if your course becomes a three year course you will have more competent nurses, and better nurses for the future. Most courses should be at a degree level.

> I am unable to list these items from 1 - 19. I agree that there are items of greater importance but as I try to pick these items out, I

find they are all related and knowledge of each of them has certain value.

I chose the five most important. The others are checked meaning that they are also important.

All these courses must be incorporated into the program so I feel it's not valid to number them as though # 19 should be eliminated.

The Section Two rankings of the Eastern NWT and the Western NWT were compared to determine correlation using Spearman Rank Correlation Coefficient. The result of this analysis was Rho ($N = 19$, $\Sigma D^2 = 82$) = .928; z = 3.937. This high correlation indicates there were no significant differences in the rankings of the Eastern NWT and the Western NWT.

The rankings of the NWT and Yukon were compared to assess correlation, again using Spearman Rank Correlation Coefficient. The result was Rho ($N = 19$, $\Sigma D^2 = 72.5$) = .936; z = 3.973. This high correlation between the NWT and the Yukon indicates no significant differences between the two Territories on the rankings of the elective courses.

Correlation between the ranking of the NWT respondents and the NWT nurses (a sub group) was Rho ($N = 19$, $\Sigma D^2 = 103$) = .91; z = 3.859; and between the Yukon respondents and Yukon nurses (a sub-group) was Rho ($N = 19$, $\Sigma D^2 = 85.5$) = .925; z = 3.924. The high correlations indicate that the nurses did not tend to rank the courses different from the other respondents .

Finally, the correlation between the rankings of the NWT nurses and the Yukon nurses resulted in Rho ($N = 19$, $\Sigma D^2 = 57$) = .95; z = 4.031. This high correlation indicates that nurses in the Yukon and Northwest Territories tend to rank the courses in a similar manner (see Table 4).

Table 4

Correlation Between Groups

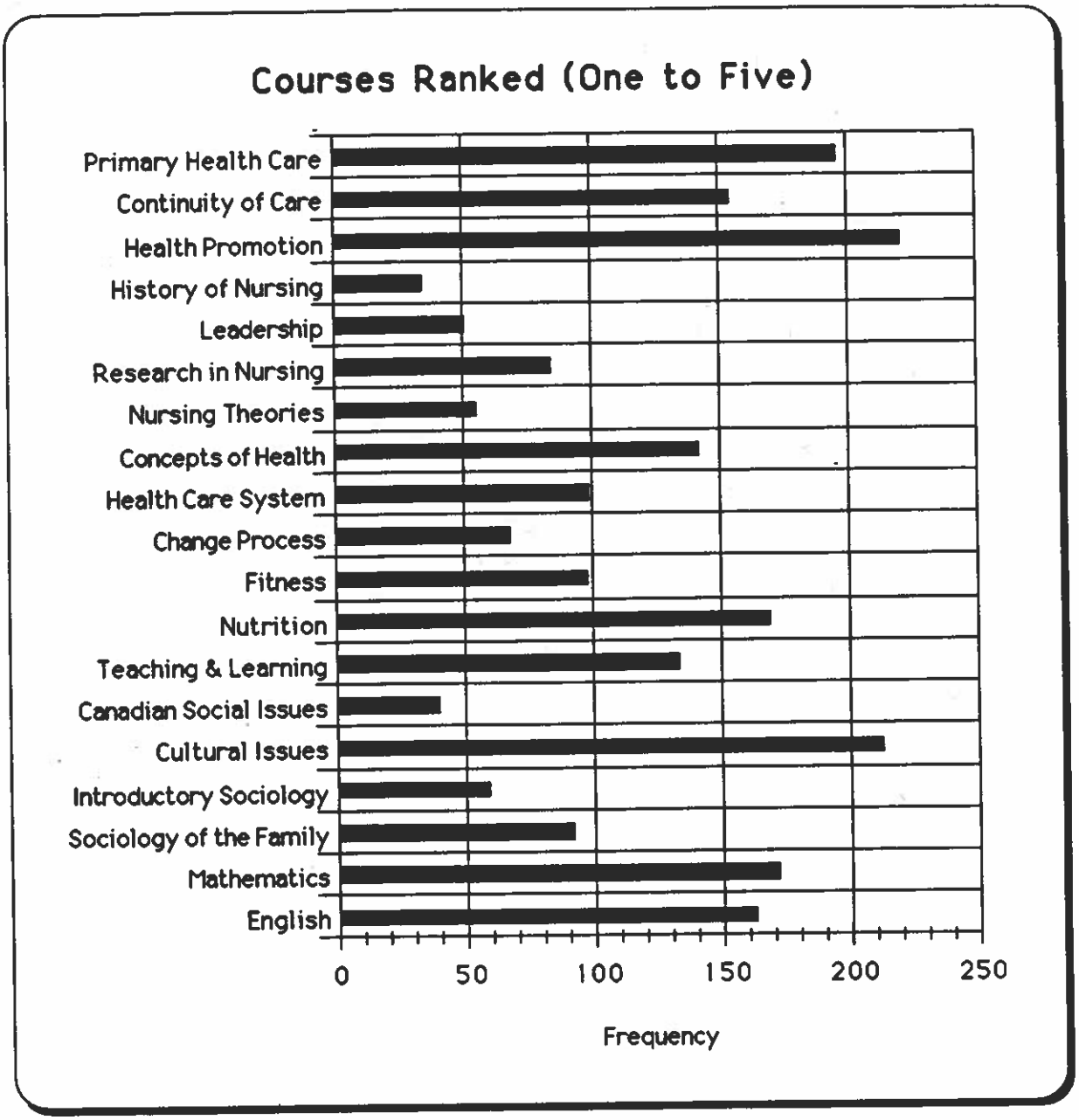
	Yukon Respondents	Yukon Nurses	NWT Respondents	NWT Nurses
Yukon Respondents	1	.925	.936	--
Yukon Nurses	.925	1	--	.950
NWT Respondents	.936	--	1	.910
NWT Nurses	--	.950	.910	1

There were so few responses from employers that a separate category was not established. Their responses are included in the respondent group for the region in which they are employers. As a result of the high correlations amongst the respondents (see Table 5), all responses were clumped for a Chi-square analysis comparing the frequency courses were listed in the first ten places. The result of the Chi-square was χ^2 (18, $\underline{N}$ = 4218) = 475.441, $\underline{p}$. = .0001. The results are significant. A scattergram of the data revealed there were four courses which were at least one standard deviation above the mean and four that were at least one standard deviation below the mean. Health Promotion was highest above the one standard deviation mark followed by Cultural Issues, Nutrition, and Primary Health Care, in descending order. At least one standard deviation below the mean were History of Nursing, Canadian Social Issues, Nursing Theories, and Introductory Sociology, in ascending order (i.e. History of Nursing was lowest). These results can be confirmed visually by examining Table 5, and Figures 4, 5, and 6. In Figures 4 and 5 the pattern of responses is similar, whereas in Figure 6, as expected, the pattern is opposite, those courses ranked high in the first five choices are low in the last five.

Table 5

Ranking of Optional Courses - By Selected Choices

Courses	Ranking												
	1	2	3	4	1 - 5	6 - 10	15 - 19	15	16	17	18	19	1 - 10
English	86	34	11	17	162	60	121	16	15	23	29	38	222
Mathematics	42	64	22	16	171	77	101	20	20	18	25	18	248
Sociology of the Family	16	16	18	20	91	132	75	24	17	12	13	9	223
Introductory Sociology	6	15	14	7	58	83	143	26	30	30	31	26	141
Cultural Issues	52	34	44	46	212	109	30	6	6	6	8	4	321
Canadian Social Issues	9	6	8	6	39	68	172	33	34	39	43	23	107
Teaching and Learning	26	16	32	29	133	125	53	23	8	11	5	6	258
Nutrition	23	31	51	37	168	149	34	9	10	8	7	0	317
Fitness	7	8	19	34	97	130	73	14	11	20	13	15	227
Change Process	9	10	15	12	67	129	86	26	25	13	12	10	196
Health Care System	16	13	15	24	98	109	98	26	30	21	17	4	207
Concepts of Health	24	29	19	36	141	130	59	14	15	12	9	9	271
Nursing Theories	11	10	12	8	55	78	164	30	43	38	32	21	133
Research in Nursing	13	18	16	18	84	94	131	28	22	33	34	14	178
Leadership	6	12	10	7	50	106	109	25	29	18	20	17	156
History of Nursing	9	2	7	9	34	41	263	24	33	44	49	113	75
Health Promotion	68	55	42	22	220	120	25	6	2	8	7	2	340
Continuity of Care	16	33	45	34	154	141	45	14	11	11	5	4	295
Primary Health Care	75	45	23	33	196	107	30	8	8	4	4	6	303


Courses Ranked (One to Five)
Primary Health Care
Continuity of Care
Health Promotion
History of Nursing
Leadership
Research in Nursing
Nursing Theories
Concepts of Health
Health Care System
Change Process
Fitness
Nutrition
Teaching & Learning
Canadian Social Issues
Cultural Issues
Introductory Sociology
Sociology of the Family
Mathematics
English
0
50
100
150
200
250
Frequency

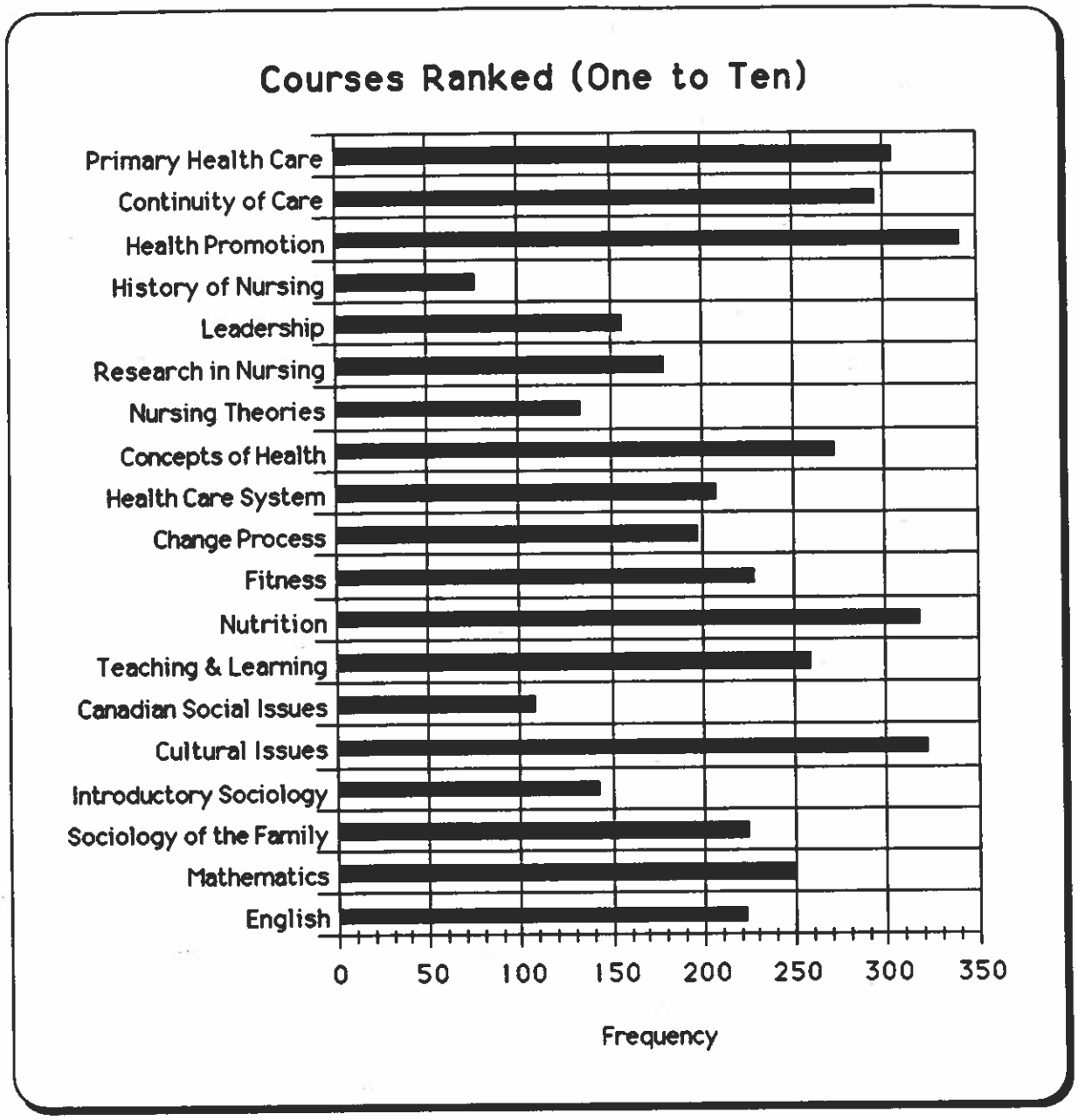
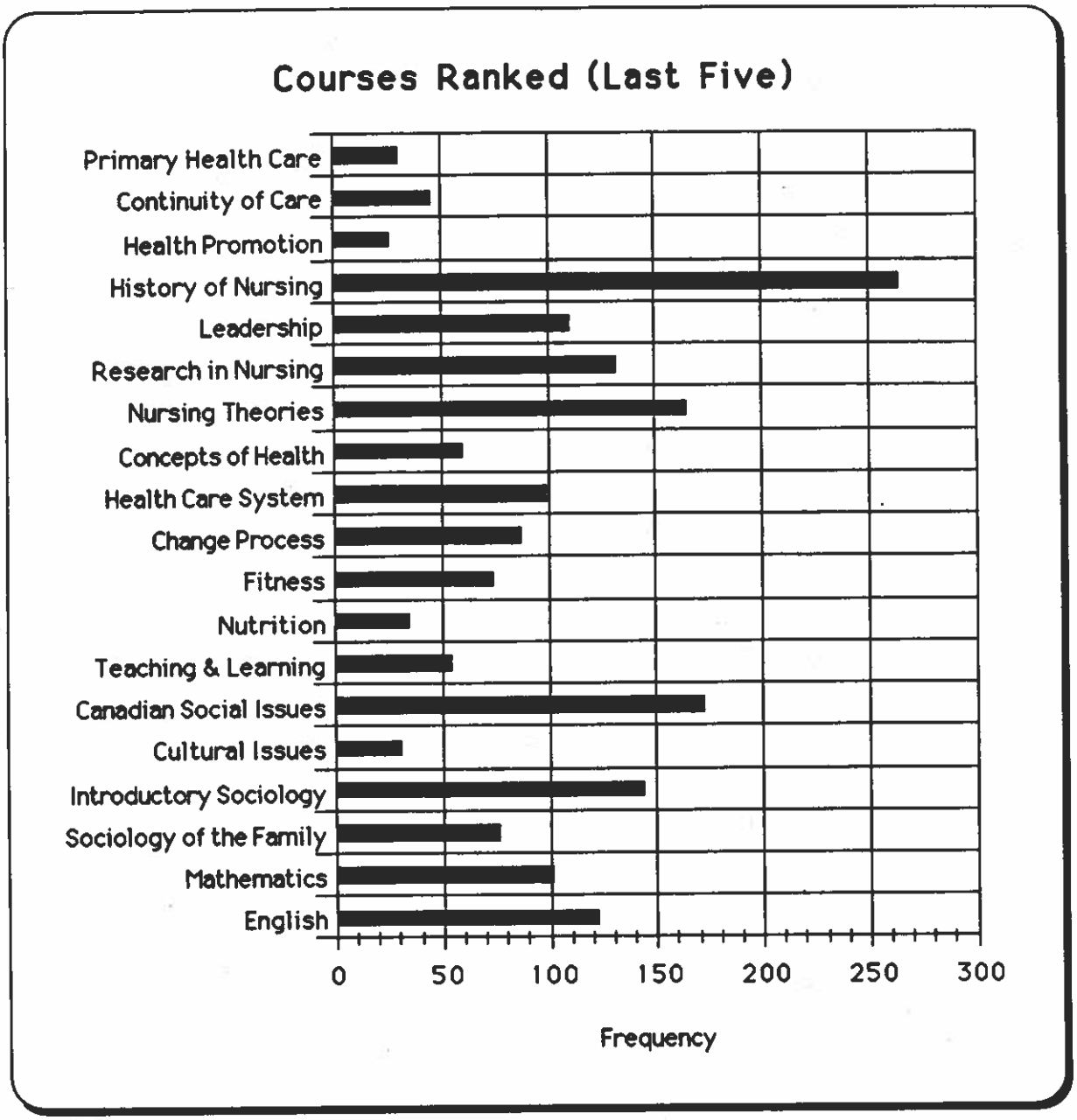

Courses Ranked (One to Ten)
Primary Health Care
Continuity of Care
Health Promotion
History of Nursing
Leadership
Research in Nursing
Nursing Theories
Concepts of Health
Health Care System
Change Process
Fitness
Nutrition
Teaching & Learning
Canadian Social Issues
Cultural Issues
Introductory Sociology
Sociology of the Family
Mathematics
English
0
50
100
150
200
250
300
350
Frequency

Figure 6



Section Two provided information on the importance attached to the elective courses by the respondents. The patterns were similar for all groups and regions. Health promotion, cultural issues, nutrition, and primary health care were high on the rankings, indicating importance attached to these courses, while introductory sociology, nursing theories, Canadian social issues, and history of nursing were ranked low.

Section Three - New Ideas

The purpose of Section Three was to elicit suggestions and ideas for a northern nursing program from respondents. This was the opportunity for collective "brain storming" by respondents across the Yukon and Northwest Territories. Some comments received were new ideas or course topics, while others reiterated areas of particular importance to the respondent. The more common suggestions (responses) are included in Table 6 with the frequency of the responses. Again, there were so few responses from the employers group that the information from those questionnaires will be reported qualitatively in Section Three.

Table 6

Suggestions for Nursing Program - Frequency of Response by Group

	Category of Respondents							
Course Suggestions (Section Three)	Eastern NWT	Western NWT	Yukon	Nurses NWT	Nurses Yukon	Empl. NWT	Empl. Yukon	Total
Advanced/Outpost Nursing	6	8	7	49	14	5		89
Baccalaureate/Internship		3	1	8	5			17
Central Location				1				1
Communications	13	24	18	19	9	4	1	88
Community Development	5	13	6	11	5	1		41
Community/Public Health	5	13	5	12	8			43
Counselling/Mental Health	5	4	2	26	5	3		45
Critical Thinking		1		12	3	1	1	18
Cultural Issues	12	21	10	20	11	1	1	76
Education/Teaching Skills	2	3	2	7	5			19
English				2				2
Growth & Development		1		3	1			5
Health Promotion/Prevention	8	10	8	10	6	2		44
High Standard of Education	1	2	4					7
Interdisciplinary Teamwork	3	2		6	7		1	19
Local Language	8	19	1	1				29
Mentor/Preceptor				2				2
Midwifery/Obstetrics	7	5		21	4			37
Nursing Role, Process, Skills				3		3	1	7
Nursing Trends & Issues		3	4	20	4	2		33

Course Suggestions (Section Three)	Category of Respondents: Eastern NWT	Western NWT	Yukon	Nurses NWT	Nurses Yukon	Empl. NWT	Empl. Yukon	Total
Organizational Skills/Mgmt.	5	3	6	30	15	1	3	63
Professionalism & Ethics	4	5	2	6	8	3		28
Practical Skills	1	6	1	26	9			43
Primary Health Care	3	3	4	19	18			47
Sciences & Mathematics	5	3	6	20	7	2		43
Social/Environmental Issues	2	7	4	10	5	1		29
Substance Abuse	2	5	9	15	7	1		39
Traditional Food & Medicine	8	12	6	8	5		1	40
Various Clinical Practica	1	2	2	39	4	1		49
Violence & Abuse Issues		2	1	7	2	2		14

While the sciences received many comments in Section One, they were mentioned less frequently here. It is possible that the lack of mention of sciences in this section could indicate a degree of satisfaction with the sciences as listed in the required courses. In any case, there was a definite emphasis on nursing practice and social relations in this section.

Communications and cultural issues continued to receive many comments from all groups. Use of local language was more likely to be reported by communities in the Northwest Territories, with the range of suggestion similar to that in Section One. While some western NWT respondents suggested that nurses should be fluent in local languages, they were more likely to encourage some knowledge of the words most useful to a nurse and/or how to work with an interpreter.

Substance abuse was mentioned proportionally more often by Yukon community members and nurses.

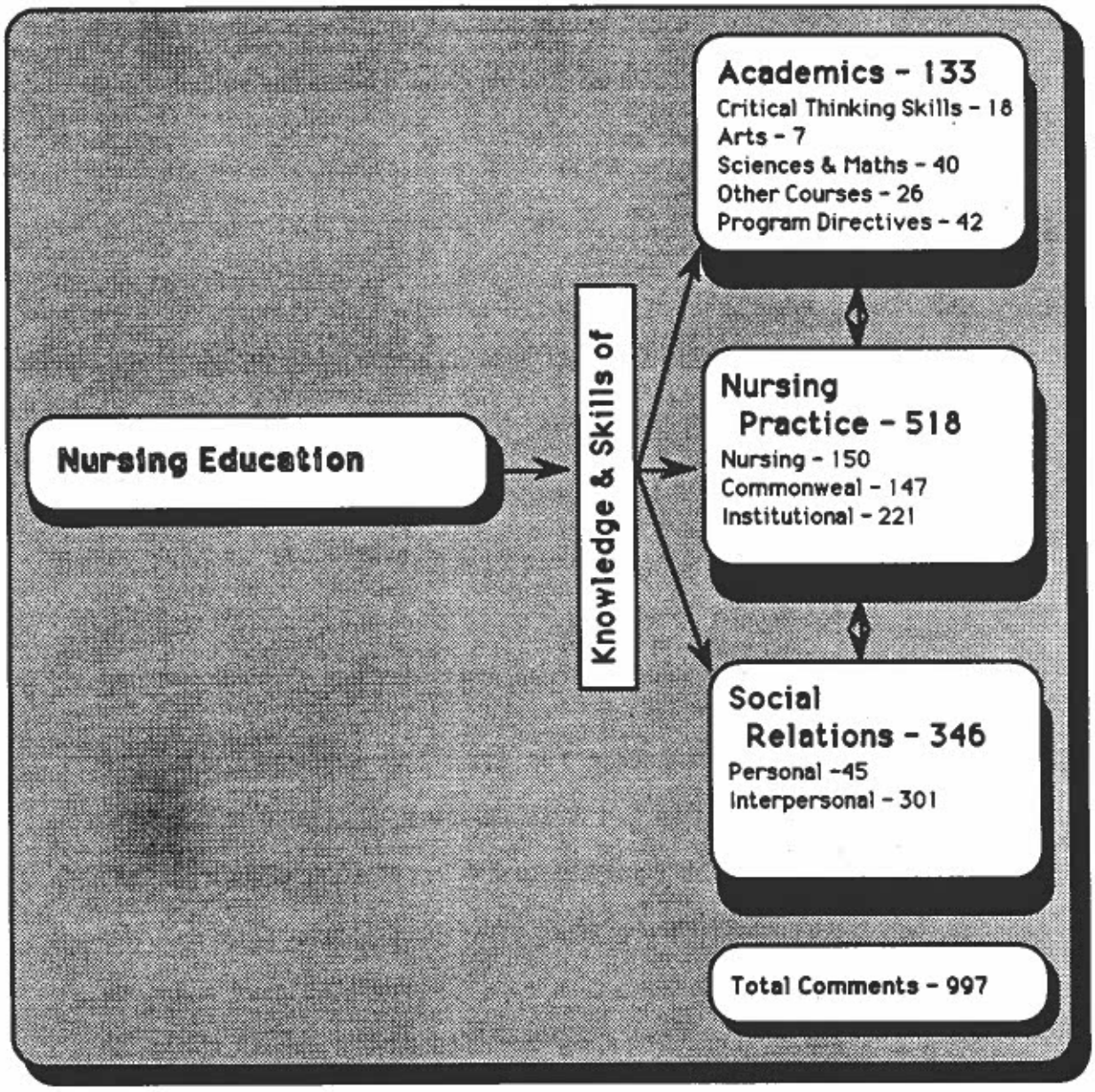
Nurses were more likely than community members to mention organizational skills and management including stress management and remaining calm under pressure; critical thinking and problem solving skills; obstetrics, mental health and illness, community and public health; advanced/outpost nursing skills; and to recommend extending the diploma program via such means as internships, extra courses, or baccalaureate preparation.

These data were also organized using the model as the guide (see Figure 7). In the Academic group, there was more emphasis on the program directives section. The

preference for a baccalaureate program and/or an internship period was noted 17 times; high standards of education was listed 7 times; while the use of a variety of clinical settings was reported 14 times. Interpersonal relations were reported most frequently in the social relations section. In nursing practice, the institutional sub-component received more comments than either nursing or commonweal which might suggest a tendency to illness care.

Figure 7

Section Three Comments - Number by Model Components



Individual comments provide a fuller sense of the scope of these responses. The comments included here cover the nursing role and the art of nursing, curriculum, student preparation, and expectations for the nursing program. Not all of these comments relate to new courses or topics, rather they indicate areas and topics which were seen as important to community members, nurses, and employers, as the following quote demonstrates.

> It has been a long time since I spent time in the hospital. I do occasionally use the local health care system. It's good to know that Inuit people are asked to help decide how they will be cared for by the nursing profession and include Inuit for these careers.

To define the educational requirements for nurses may be a daunting task, but the following comments point to the essence of nursing - the art, the science, and the practice and thereby, the educational requirements.

> First the patient explains what is wrong. Then the nurses should at least explain what is wrong and to try and prevent it in the future.

> Nurses should make more home visits to people to teach about preventing sicknesses and personal hygiene. Also to learn from people their worries about hospitals and medicines.

> I believe people need to take their own health care seriously and therefore teaching programs having nursing staff involved with teaching health promotion and awareness is important. People will take their health more seriously when taught by a health care worker eg. nurse. More involvement in community health and striving for more understanding of the people's real health problems is important in maintaining a healthier community.

> Although this may be inappropriate for a basic nursing program, I think that work needs to be done to modify or create new

screening tools, growth and development charts etc., that reflect the cultures and people of the north. For example, the DDST is not applicable to a large number of people in the NWT.

Come for coffee. Visit with everyone.

I think nurses should take courses on (and practise) making people feel special.

I think for skills it would be good to have skills such as understanding people and caring.

The ability to adapt to each patient's concerns and each days demands with ease and efficiency.

I believe nurses have a very important role in the caring of sick people because they spend more time with the patients than the doctor. I do not think enough time is spent on reminding nurses that they are dealing with tired, sick, and scared people who need reassurance and a kind word. This is not just a job.

One of the most important traits or practices for potential nurses is a genuine and unconditional caring for patients. Unfortunately this is not something that can be taught from a textbook, but possibly it can be practiced. Nurses should become aware of different methods of dealing with the wide variety of personalities they will encounter in their field. After all, after listening to people who have been in hospitals for any length of time, their first comment is usually about the manner in which they've been treated by the nursing staff.

I feel one of the most important aspects in nursing is people skills. I have no doubt that nurses perform their jobs to maximum

capability, but I find the weakest area is the direct one-on-one communication with the patients.

Personal relations between nurses and patients are very important. Positive interacting depends on the nurse whose maturity is essential, based on knowledge, reflection and experience - technical skills are easier to acquire.

I think the most important thing is something that a nursing student either has to doesn't have; a helping attitude. I don't know if that can be taught so much as developed. Perhaps more work and effort should go into selecting or approving or screening nursing students.

Nursing could be considered as leadership through servitude with a genuine wish to care for people as opposed to the "what is expected of leaders". ... Northern nursing carries a heavy load of responsibility; is the support system in place? (I don't know). Community health promotion with attention to prevention is right and should be increased to the maximum.

Emphasis on the role of the nurse as a member of the community. The educational focus must send a clear message of their role in a collaborative setting with the rest of the community to address health issues in its widest definition i.e. active participation in community organizations.

The whole health care profession has to concentrate more on prevention of disease. Nurses should have a lot of training in this area so they can go back to their communities and encourage people about nutrition, avoiding drugs and alcohol. This should be incorporated into the school system so that a nurse would be able to

teach one class a day to elementary school children the benefits of good nutrition etc. Also should be skilled in being able to work with elders in communities in encouraging all the people in the community to work together for the better health of all.

Preventative medicine is most important. Topics should gear toward education, fitness, diet, lifestyle and their impact on overall health.

Although mentioned in the previous section, I just want to stress the importance of Health Promotion (and other related topics) courses in a northern nursing school. Having worked here over one year and observing all the problems which can almost be entirely prevented through health promotion, I feel there is a need for such programs. We are all aware of the benefits of health promotion activities, however, implementing them (with success), in my experience, has proven to be very difficult and frustrating - especially in the north. Learning methods to successfully implement such programs would be extremely helpful.

The preparation of prospective students was touched on by some respondents, often in relation to comments about the goals of the program. Other respondents commented on the program itself - their concerns and their expectations for the graduates.

Although I listed math and English fairly low on the previous page, the reality is that many northern students are not ready or able to handle a full load of academic courses. It would be important to build into the program a Health related up-grading prior to knowledge courses. This would familiarize the students with the vocabulary and skills (i.e. report writing) before they began their nursing courses. Also some knowledge of "traditional nursing" practices or traditional healing would be of some help.

Prerequisites are important. Prospective students should have strong communication and calculating skills as well as the ability to learn. Good life skills are also important. I'm assuming that many of the students will practise in isolated communities. They'll need to have skills for adapting to professional as well as personal isolation.

Changing roles of nurses with a look to the future. Let's not be too traditional here - hospital model versus community care, the nurse as a professional free agent corporation - you know - explore a little.

Overview of opportunities open to nurses - this is a wondrously versatile career and students should recognize it as such. Northern nurses should not in any way be limited to positions in the north. Our profession gives us worldwide opportunities.

I can see that a nurse trained up here and aware of cross cultural theories may be very effective wherever she chooses to practise.

1. Ensure that prerequisites are in place and entry requirements are met so that all students (native and non-native) have a chance for success (i.e. do not make allowances or lower standards on entry to try to get more native students - this is unfair to them later in the program). Provide appropriate pre-entry courses in math, English, socials etc.

2. Ensure that the 2 year diploma program feeds into a degree program so that students have options to continue studies in the future (i.e. do not make northern nurses into 2nd class or "special" nurses - give them future choices).

3. Encourage mature students (i.e. make it possible to have a family life and still return to school) - in my experience in nursing (25 years) mature students make the best students - life experience, commitment, determination, and community involvement are assets - they will work hard and remain in nursing!

4. Core nursing courses can be taken on a part time basis.

5. A work/study program might help single moms or others be able to afford to go into nursing.

It would appear from your questionnaire that you will be setting up your nursing program to accommodate people

a) with a limited education

b) who are unwilling or unable to study full time

c) who will be unable to work in the south

I would not wish a member of my family to be cared for by a person who is incapable of completing a high school education (prerequisites) or who is not dedicated enough to complete their nursing education in the appropriate time (Section 4)

It seems that the nursing education will be of a lower standard than in the south (special consideration being given to all and sundry to take the course) - would registration in the [territory] be accepted in the provinces?

With the provinces going to the degree courses only by the year 2000 - why are you starting a program in the mid 1990's for diploma nurses - why not a degree program?

I strongly recommend, think that nurses should be trained in centres that offer high quality professional teachers and facilities i.e. labs etc. This is not possible in the [city] area. I would strongly recommend no diploma nursing be offered at [...] College (and certainly you can't do a B.Sc.N.)

Presently there are a lot of unemployed nurses in [city] - some on UIC. Why are you looking at offering a nursing course in the [territory]? Presently our [territory] government is having a hard time paying its bills - why are you looking at expanding? If it is for native nurses - is there not already available funding for them through other sources? This is a time of restraint - there are probably 10 to 20 or more nurses presently looking for full or part time employment in [city] .

I realize that at this point it is hard to give definite plans as to the courses to be offered, however, I feel concerned that the overall tone of this form is that this will be training of a lower standard. When the nurses associations of the provinces are aiming towards mandatory degree courses within the next few years, I wonder that this proposed course may not be accepted as at a registration level in other areas. I do not believe that it is fair to northern students to make them unable to compete in the wider nursing field, nor to the population of the north to give them less than the best in service. ...I really feel concerned that the desire to have things available in the North should not lead to lowering of standards.

My recommendation is a third year for internship covering all aspects of the available health provisions. Also this will hopefully assure reaching the next step, entrance to a degree program.

I don't think any RN or BN course is adequate for outpost nursing. Basic course should give good basis for further training.

I would believe that a basic diploma course unless supported by practical field experience and theoretical work does not or may

not adequately prepare an RN for community nursing. What is the goal - to develop RN for community or hospital based jobs?

I believe that a program in the north should lead to a Baccalaureate degree. If these nurses wish to work in nursing stations they will require more preparation than diploma and also require either experience or a nursing outpost program as well.

Most importantly, the program must have high standards academically, clinically, ethically, and professionally. These standards cannot be compromised in the interest of having the entire class graduating together. The future interests of the north and her people will not be guarded if the graduates of this program are not required to meet standards at the very least equivalent to those in the south. With a focus upon attracting aboriginal peoples into the nursing profession, providing a "substandard" education to them would be unfair in every way.

Thank you very much for the opportunity to be involved. These are very exciting times for the north. I think we have to prepare nurses to meet national exams so must have basics of most programs but it's essential that we really have a community focus and involvement for practica in health centres.

Section Four - Structure

This section was divided into four subsections dealing with program delivery suggestions which respondents were asked to rank; a section requesting preferred months for study; the opportunity to suggest other instructors for nursing students; and comments on supports for nursing students.

Respondents were asked to rank the seven suggestions. Overall results are included in Table 7.

Table 7

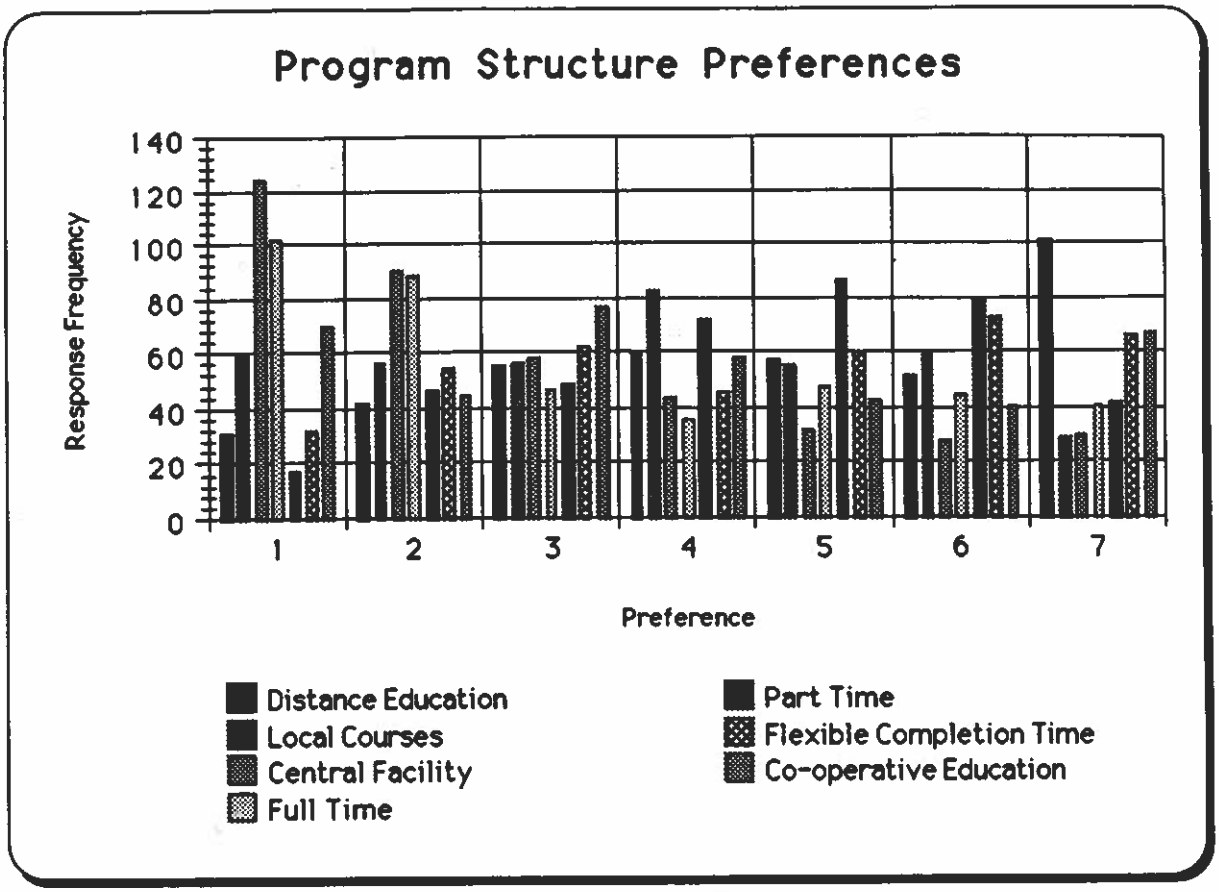
Ranking of Program Delivery Suggestions - Frequency of Each Choice

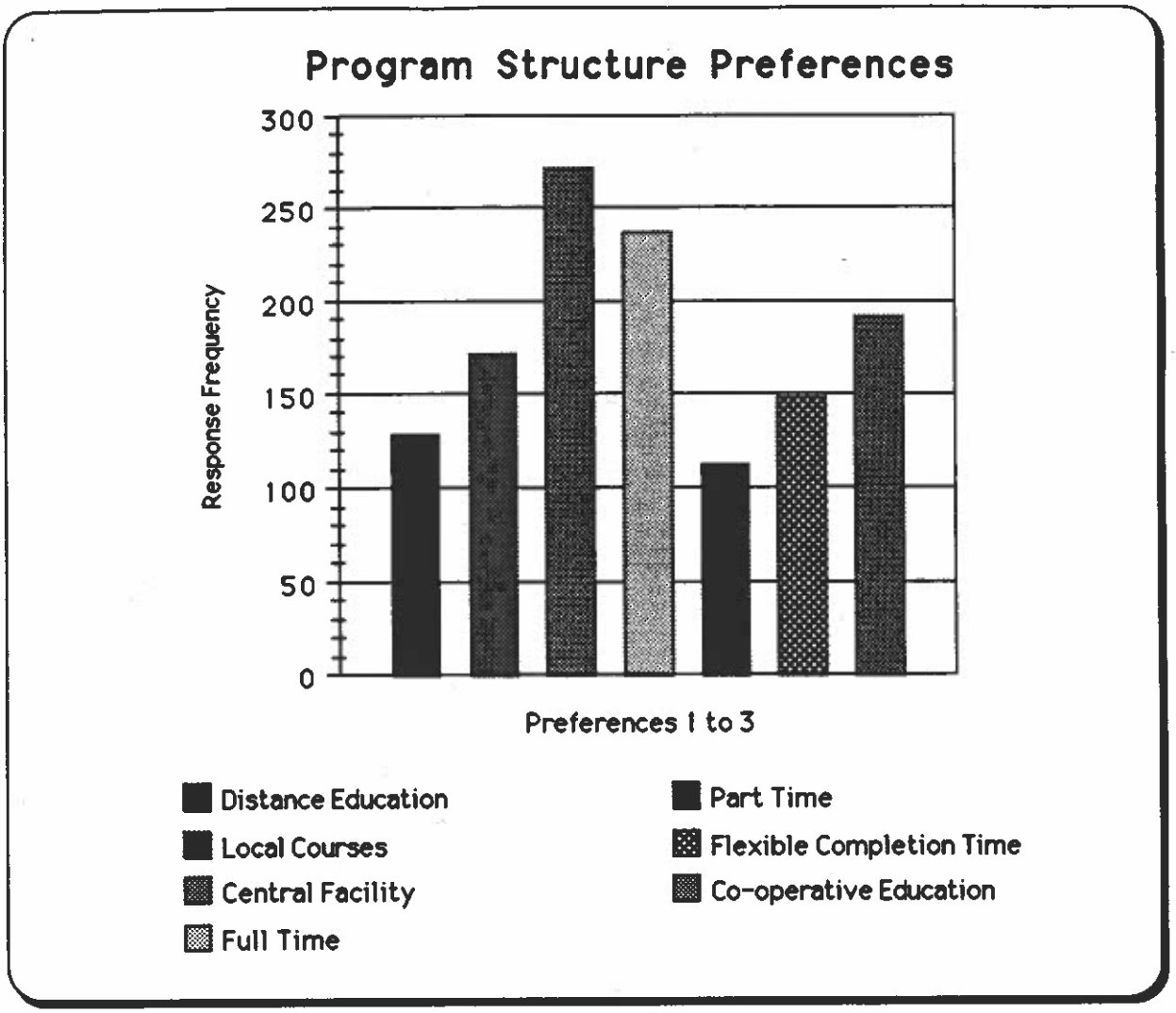
	Ranking							
Choices	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**1-3**
Distance Education	31	42	55	60	57	51	101	128
Local Courses	59	56	56	83	55	59	29	171
Central Facility	124	90	58	44	32	28	30	272
Full Time	102	88	47	36	48	45	41	237
Part Time	17	47	49	72	86	79	42	113
Flexible Completion Time	32	54	62	46	60	73	66	148
Co-operative Education	70	45	77	58	43	41	67	192

The Eastern NWT and Western NWT were compared on the first three choices using Spearman Rank Correlation Coefficient with Rho ($\underline{N} = 7, \Sigma D^2 = 5) = .991$; $z = 2.428$. There is a strong correlation between the Eastern and Western NWT, meaning that there was little difference in the ranking by each region. The Yukon and Northwest Territories were then compared, yielding the result Rho ($\underline{N} = 7, \Sigma D^2 = 8) = .857$; $z = 2.1$ which indicates a strong correlation between the two territories. Comparison of the rankings of the NWT and Yukon nurses, however, provided different results with Rho ($\underline{N} = 7, \Sigma D^2 = 28.5) = .491$; $z = 1.203$. Yukon and NWT nurses ordered the items differently. Both groups ranked "central facility" and "full time" in positions 1 and 2 respectively. While Yukon nurses tended to rank Co-operative education fairly high, NWT nurses were more likely to suggest flexible completion time.

Program preferences, in general, are presented in Figures 8 and 9. Figure 8 indicates the courses by number of choice. As can be seen, those items which were high as choice 1 tend to be low as choice 7. Figure 9 is a compilation of choices 1 through 3 and presents more clearly the preferences for central facility, full time education, and co-operative education.

Figure 8


Program Structure Preferences
Response Frequency
140
120
100
80
60
40
20
0
1
2
3
4
5
6
7
Preference
Distance Education
Local Courses
Central Facility
Full Time
Part Time
Flexible Completion Time
Co-operative Education



A number of respondents offered comments on this section some of which are included here.

> The social work program initiated between the years 1987 to 1990 could pose as a good model to follow, where there was a combination of college training, actual field experience and then return to college training. Also training in a centralized place offers more support and consistency, however, field experience also assists with actual hands on work.

> I find part A an unhelpful ranking exercise as all aspects are important. My main concern would be to ensure mastery learning at a pace suited by the learner but within a reasonable time frame.

Co-operative education is very important. it gives students a chance to practise and get a feel for what they have learned to a point and decide if they are on the right track or not.

Allowing part time education will open the opportunities for people with families that need to work to support them.

Because people's lives will depend on the quality of education the nurse will receive, they should go to school full time. It would be nice, however, if it was available in the [territory].

I do not believe that nursing could be adequately taught on a part-time or flexible schedule. Obviously if a pregnancy or home responsibility intervened, some accommodation could be made.

Through other courses we have learned that having students in a central location for 6 - 8 weeks and then home for 6 - 8 weeks seems to be the best way or we lose too many of them.

I really like the idea of a distance education course, they seem to work fairly well up here in the North. I like the co-op approach also. Integrating the two above is a good idea.

Re. Co-operative education - imagine getting paid to experiment on the patient.

Co-op programs I've encountered tend to do really well and the financial pressure of students is relieved which allows the student to concentrate on the learning.

I don't think students should get paid for the skills they perform. This is like the nursing programs of the past and implementing students as cheap labour. If students need financial

assistance more attention should be put in the area of bursaries or grants.

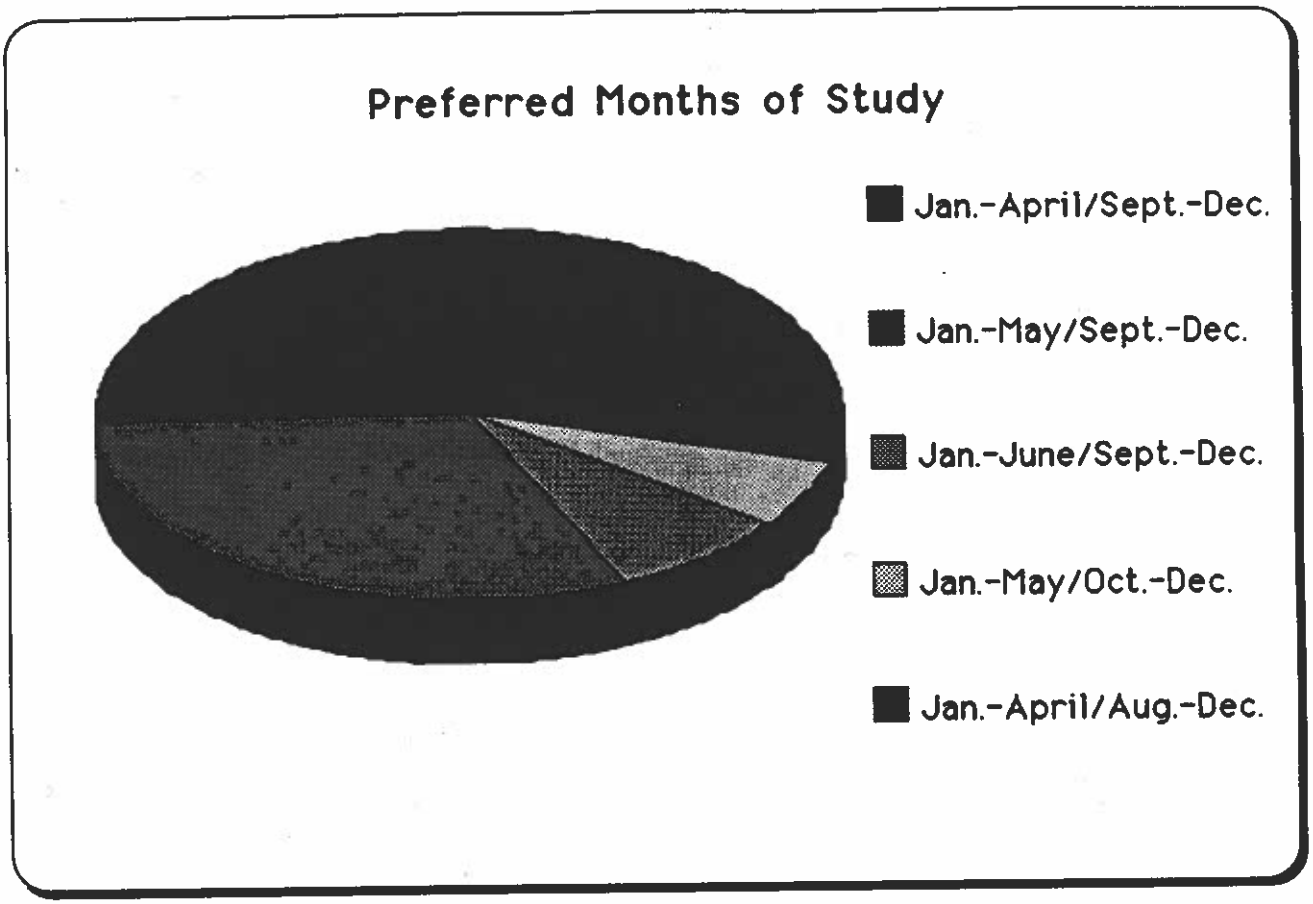
Months for Study

Months for study revealed some interesting comments and suggestions, nevertheless, the standard school year was recommended by most people for two reasons in particular. First, the short northern summer is a time of being outside or "on the land" and many respondents reported that this time is important for families and retaining traditional pursuits. Second, for those students who may have families, the opportunity to study while children are also at school was seen as a definite benefit. Table 8 indicates the frequency of responses for the most commonly reported months of study, while figure 10 provides a graphic presentation of the same data. As can be seen, the first choice was consistent for all groups - January to April and September to December.

Table 8

Preferred Months of Study - Frequency by Group

	Communities			Nurses		Employers	
	Eastern	Western	Yukon	NWT	Yukon	NWT	Yukon
Jan. - April/Sept. - Dec.	10	21	13	22	16	3	3
Jan. - May/Sept. - Dec.	4	11	8	18	12	1	1
Jan. - June/Sept. - Dec.	1	10	2	0	0	0	1
Jan. - May/Oct. - Dec.	2	2	5	0	0	1	0
Jan. - April/Aug. - Dec.	6	1	1	0	0	0	0



There were a number of comments regarding the months of study. While there was much consensus about studying during the regular school year and having the summer off, there were some who felt otherwise. Following is a sample of responses.

> I think the courses could be given during the regular class months for elementary/high school students to accommodate nursing students with families of their own.

> Students with children in school would find it easier to be on the same schedule. Summer off from school leaves students looking for work at the same time most of the work is available - tourist season.

> All months - People need health care in the summer too. A full time commitment is necessary to achieve the highest level of learning.

Should be year round with learning and practice being continuous.

A commitment is needed if you wish to nurse - you can't go into a shift work or 24 hour on call job if you are picky about school months.

June, July, and August are the times that it is hard to study. People are out on the land doing cultural things.

Warmer seasons are bad timing when people want to be out camping or holidaying.

I think it would be better if the student took courses at these times [Jan-May & Sept - Dec.], since people like to go out on the land when the weather is warmer.

Instructors for Nursing Students

There were many suggestions for additional instructors for a nursing program. A community focus was noted with suggestions which ranged from qualified persons with degrees to teach an area related to their degree to members of volunteer organizations in the community. The most commonly reported categories are reported in Table 9 and pictorially presented in Figure 11.

Some elaboration of the categories is necessary. The term "nurses" refers to those instances when respondents stated that nurses were the only ones qualified to teach nursing or recommended that other persons be used as resources but not to instruct courses. A number of respondents further recommended that only those nurses qualified to instruct should be involved in the formal educational setting. One respondent suggested that only Masters prepared nurses should instruct. The term "Physician" refers to both general practitioners and specialists. Comments on physicians ranged from doctors teaching nurses because they know more to using physicians selectively for portions of courses. "Elders" refers to respected members of the community (both aboriginal and other) who are

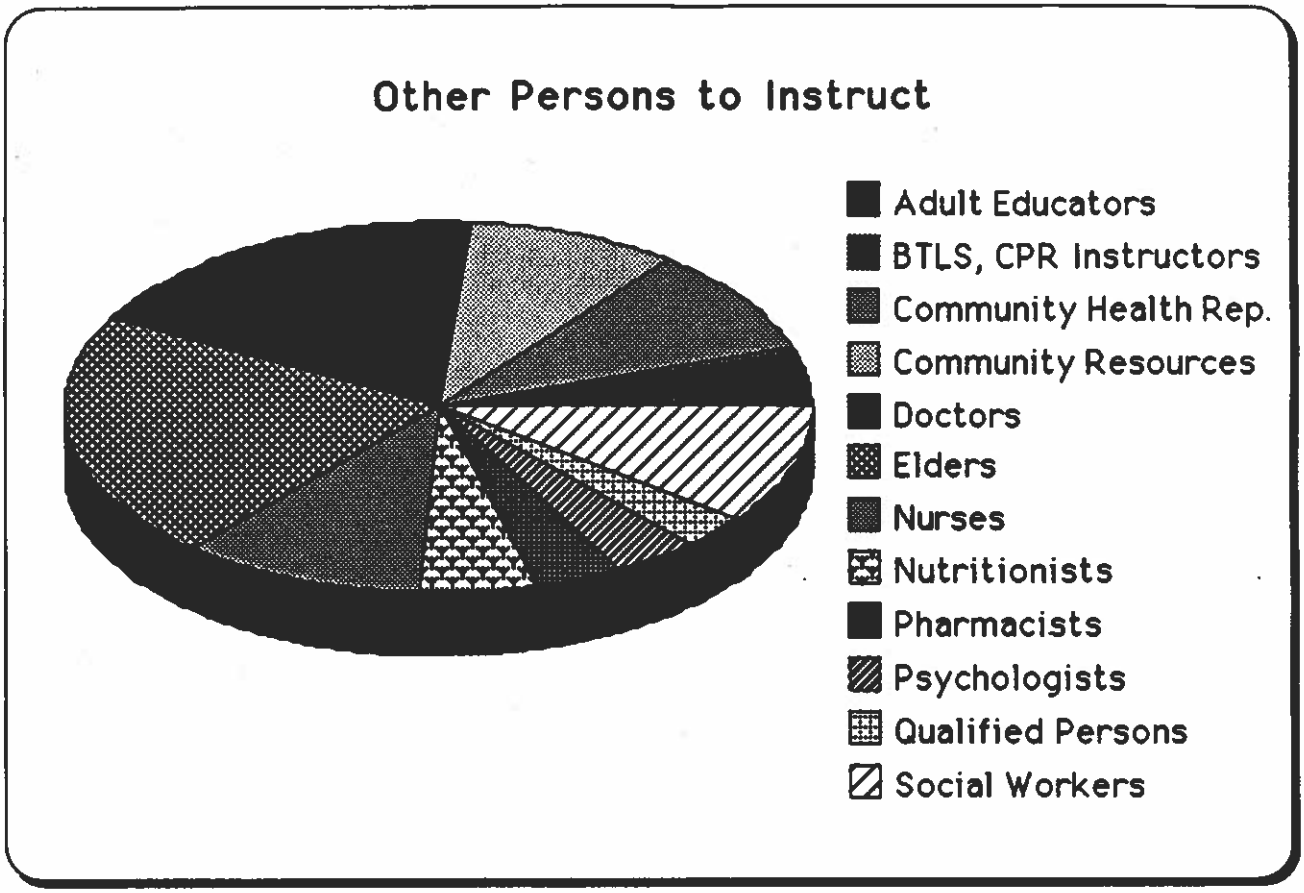
known to be wise and includes traditional healers. "Community Resources" is a broad term for many of the persons or groups who have particular expertise in our communities. Hunters and trappers were placed in this group and were recommended to teach survival in the bush. Experienced homemakers were also recommended for information on day to day life, child care and other topics. All other categories are self-explanatory with the exception of "Qualified Person with Degree". This category includes those persons who have an area of specialty related to nursing and have completed at least an undergraduate degree in that field.

Table 9

Other Persons to Instruct - Frequency by Groups

	Communities			Nurses		Employers	
	Eastern	Western	Yukon	NWT	Yukon	NWT	Yukon
Adult Educators	3	6	0	8	6	0	0
BTLS, CPR Instructors	0	0	0	1	1	0	0
Community Health Rep.	7	13	4	14	3	2	1
Community Resources	13	9	6	11	4	0	0
Doctors	5	34	14	22	10	1	1
Elders	22	30	6	26	15	2	2
Nurses	7	14	13	7	7	2	0
Nutritionists	0	0	1	14	9	0	0
Pharmacists	1	0	0	10	7	0	1
Psychologists	0	2	2	5	8	0	0
Qualified Persons	0	0	1	8	5	0	0
Social Workers	5	5	2	23	10	1	3

Observation of Table 9 and Figure 11 discloses that elders were mentioned most frequently as someone who should be involved in teaching nurses, followed by doctors, nurses only, social workers, community health representatives, and community resources. The frequency with which elders were reported was consistent with the desire for community involvement and primary health care.



Some quotes are included to broaden the perspective and enhance the understanding of the categories as presented above. A few respondents did name particular individuals in their community, but most reported only a category of potential instructors. Names of individuals are not included in this report.

Elders - how they used to survive after the birth of a newborn baby.

Elders know the history and could give them knowledge.

Acknowledged cultural leaders to ensure graduates are aware of and understand cultural differences - elders with no teaching experience can be ineffective.

Community nurses - besides the nursing teachers, I think it would be important to have the input of community nurses as they

often work closely with patients in a remote setting and could be a great source of information and support.

I believe RNs (preferably with BN or MN) should be the persons responsible for teaching although I certainly believe in involving many people - but on a guest lecturer basis only.

Doctors and nurses working up north because they already have had first hand experience and they know the type of people and occurrences that people go to the hospital or check ups for.

Physicians to assist understanding relationship between nurses and doctors.

At [hospital] we have many very talented physicians who are excellent teachers. While they most likely could not teach entire courses, I'm sure they could be an invaluable resource.

CHR knows the community

Social workers and counsellors to gain a full understanding of social problems.

Social workers to provide a familiarity with their role and to offer a social perspective to client problems/needs.

Patients - I think part of the course should be consultation with a random selection of people who had once been a patient to get their opinion on what nurses did best for them to help them towards recovery and what was handled poorly etc.

Mothers because they have brought up their children and have experience.

Sociologist, social developer, community worker, health administrator because nurses need a different perspective on health care. Nurses need to realize that the profession is part of a larger system that included client group, other resources, tradition, history, economics social development, health of the community.

Supports for Nursing Students

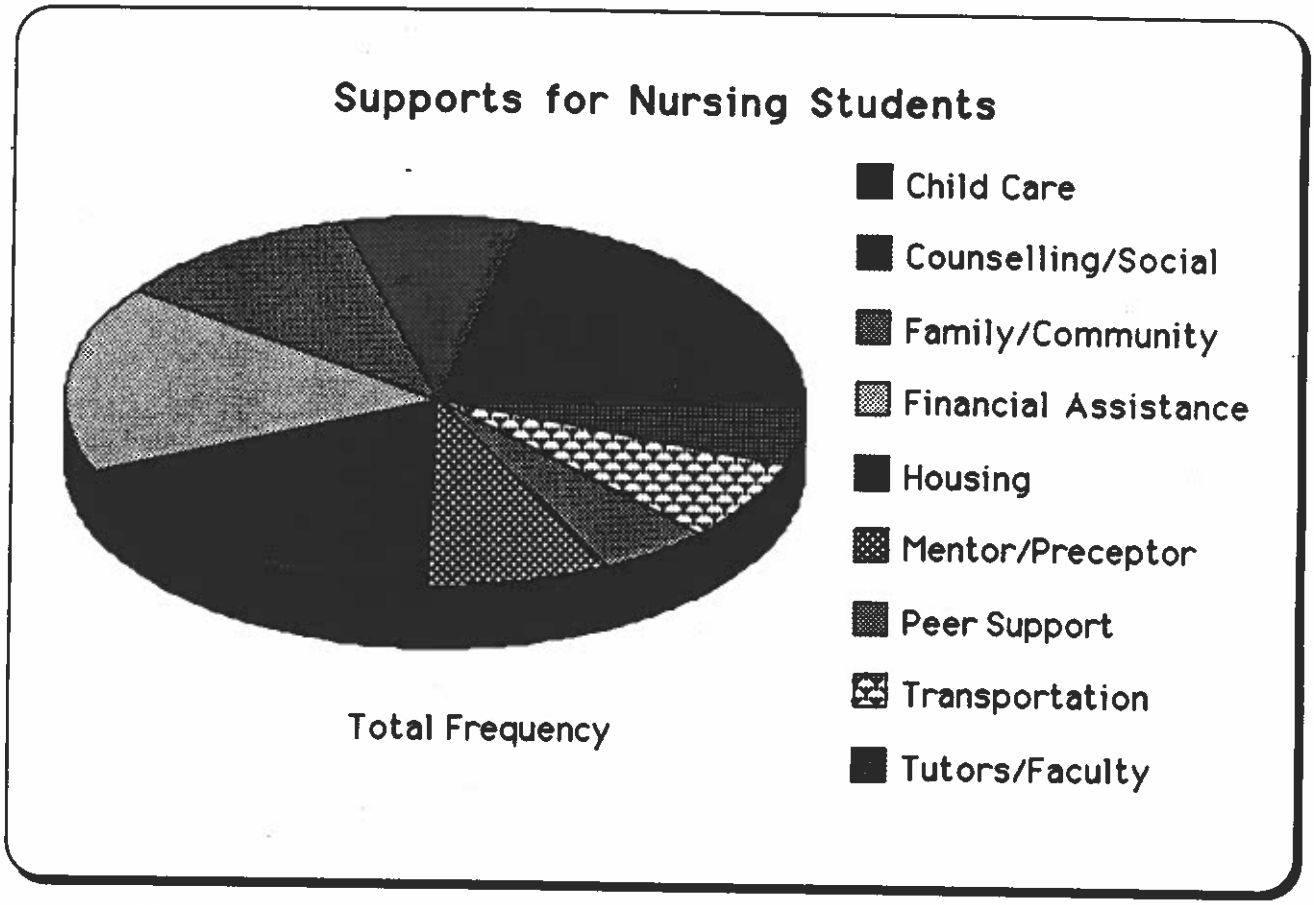
In this part, respondents were asked for suggestions which might improve the success of students in the nursing program. Affordable housing, suitable for families as necessary was reported by all groups. Flexible child care which would accommodate the hours students may spend in clinical placements and be located close to clinical/school sites was recommended. Many people recommended some financial assistance, but only a few suggested students should be funded completely. Most respondents indicated that access to low interest loans, scholarships and bursaries would be most helpful. Community members were more likely to name family and community members as sources of support. Nurses, on the other hand were more likely to suggest mentors or preceptors and peer study support groups as important to the success of nursing students (see Table 10 and Figure 12). Again, the number for the employers group were small.

Table 10

Support for Nursing Students - Frequency by Groups

	Communities			Nurses		Employers	
	Eastern	Western	Yukon	NWT	Yukon	NWT	Yukon
Child Care	20	26	15	46	25	3	1
Counselling/Social	9	12	5	14	7	1	2
Family/Comm. Support	11	12	8	3	4	0	0
Financial Assistance	16	29	19	21	18	1	1
Housing	24	30	12	31	17	1	1
Mentor/Preceptor	4	5	4	28	8	2	1
Peer Support Groups	2	6	1	16	4	2	0
Transportation	10	16	4	10	4	0	0
Tutors/Faculty Advisor	3	6	1	15	4	3	2

Figure 12



The following quotes will assist in appreciating the breadth of suggestions presented by the respondents.

Counsellor to assist with personal problems, adjustments to being back in school.

Tutorial Staff to encourage, enhance, support the learning process. Assist in establishing study habits

Help with place to live, need to have comfortable home atmosphere to do well in school.

Housing - a place to stay temporary and feel at home.

Housing or housing subsidy since the environment needs to be stable before learning can take place. A life in crisis is a mind closed to learning.

Community and family support for this person to reach their goals during the course.

Community group support (i.e. from Hamlet, Women's group etc.) - when the community itself supports people (students), it is this encouragement that will enable them to succeed.

Family and friends for emotional support and encouragement. Also the local chapters of NWTRNA [Northwest Territories Registered Nurses Association] could help with such things as being a mentor to any student who needs extra help and support.

A human well-adjusted instructor, someone who understands the profession, its stresses, and the pressures of being a nursing student.

Fellow students - I feel the idea of a nursing residence is very helpful, nursing students help each other through the tough times.

Look after the interests (well being) of the whole family. Students often quit when problems come to people in the family, not just the student.

Central co-ordination of support - one or two persons who know what services are available and can assess what each individual needs instead of going from one agency to another.

Student loans and Territorial student grants are particularly important for single parents whose inherent financial limitations might otherwise prevent their obtaining the education needed to enhance their qualifications and skills.

I believe that financial support should be equal for those in need regardless of race.

Help should only be given if it is needed. Right now, in some cases, our government throws money around too easily and in other cases refuses it.

Do not give nursing students any incentives. Not available to other disciplines. Too many subsidies will attract sub-standard students. Have them make a commitment and hold to it. Offer forgivable loans.

Child care (flexible, day homes) because its harder to concentrate on your work if you worry about where your child is and that you have to hurry just to pick them up on time or that they're being fed properly.

I understand the question and believe everything aforementioned are all a positive reinforcement but why should the nursing profession have to offer such things. I support these options 100% but I guess the drive inside oneself and credibility of having such an honorable profession with overwhelming satisfactory results should be reason enough to succeed.

Study fair and square, plan time to study. If you party you feel sick so don't party if you want to get ahead. It's better to fill life with knowledge. In the future you will use it.

Students need to have adequate academic entrance qualifications. Attempting to obtain these enroute poses unreasonable expectations.

Short semester initially so there is not too long a break from home community at first. Gradually extend length of semester as students are more self-assured.

Qualified, experienced northern interviewer and a process of assessing the student's level of maturity, attitudes, and communication abilities.

Section Six - Nurses and Employers

Nurses

Additional information was sought from nurses and employers. That information is presented here. Nurses were asked to indicate whether their original education in nursing was at a diploma or degree level, other nursing education they have completed, years of experience, type of work and length of time in present position . In the Northwest Territories 81 (71.7%) nurses indicated their basic education was at the diploma level, while 32 (28.3%) were educated at the baccalaureate level (see Table 11). Of the 81 diploma nurses, 18 (22.2%) have completed a post - basic degree in nursing. The range of years of experience was from less than 1 year to 39 years, with the mean being 12.2 years and the standard deviation 8.2 (see Table 12 & Figure 13). The time in present position ranged from less than 1 year to 22 years, with 27 respondents being in their present position for less than one year (see Table 13). The mean time in present position was 3.0 years and the standard deviation was 3.19. Time in present position is difficult to interpret due to changes of position with the same employer. In one case a nurse had just recently accepted a management position with the employer for whom she had worked a number of years and therefore indicated she was employed in her present position for less than a year.

In the Yukon 40 (75.5%) nurses were educated at the diploma level and 13 (24.5%) at the baccalaureate level. There were 14 (35%) of the 40 diploma educated nurses who have completed post basic degrees in nursing (see Table 11). The mean number of years of nursing experience was 16.9 with a standard deviation of 8.187 (see Table 12 & Figure 14). The range of nursing experience was from 1 year to 35 years. There were 8 nurses

who reported being in their present position for less than one year with a range from less than one to 19 years in present position. The mean time in present position was 4.2 years with a standard deviation of 4.2 (see Table 13).

The type of work done by nurses was not clearly indicated on the questionnaires (i.e. present position).

Years of experience is an interesting category between the two Territories. In the Northwest Territories nurses with five to nine years of experience comprised the largest group of respondents with relatively few nurses having 25 years or more experience. There was good representation in the 0 to 4, 10 to 14, and 15 to 19 years of experience groups. In the Yukon there were relatively few nurses with 0 to 4 years experience, while the largest group was the 10 to 14 years experience. These patterns may reflect hiring patterns and population patterns in the Territories.

Table 11

Basic Education of Nurses & Post-Basic Nursing Degrees

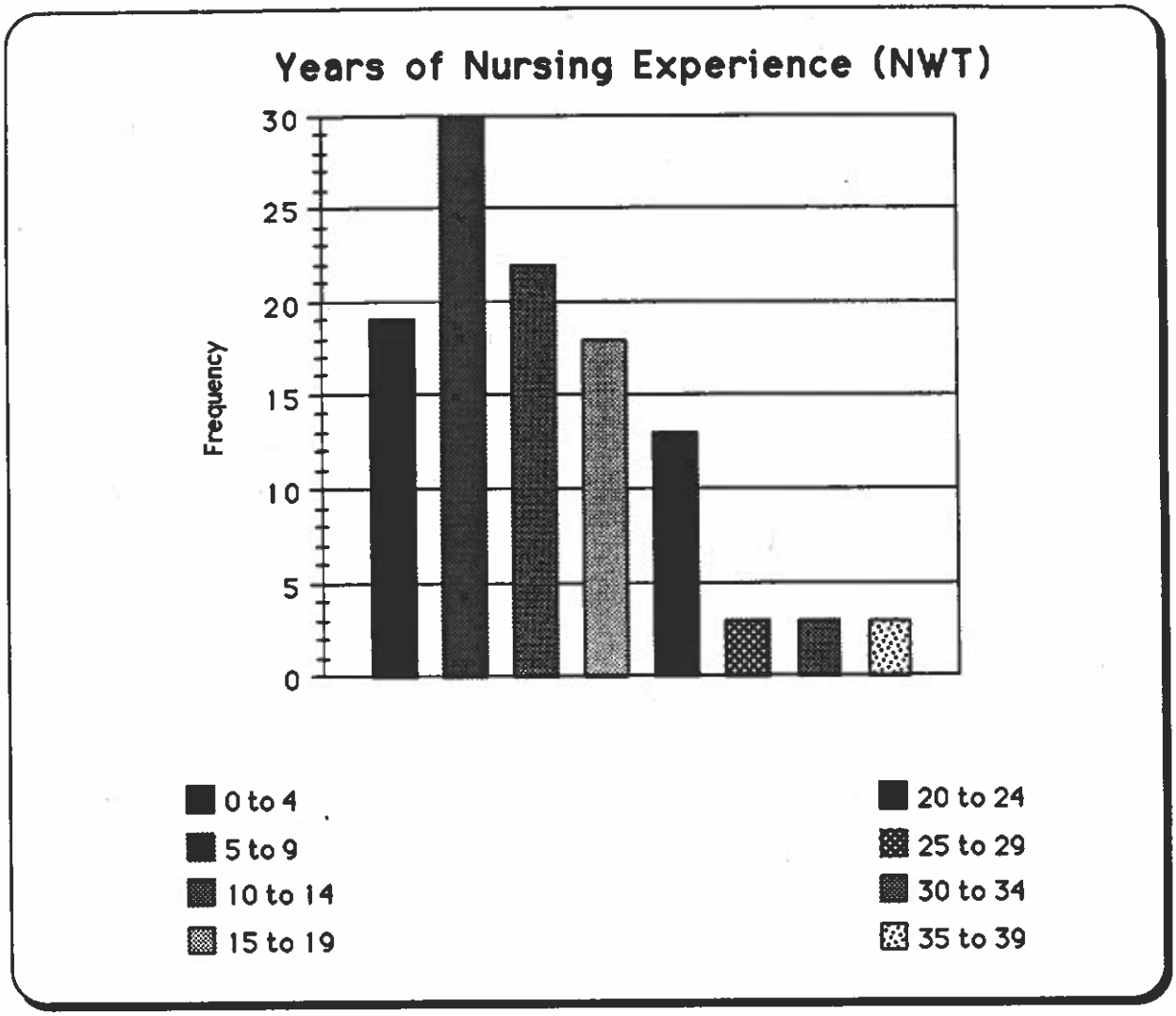
	NWT		Yukon	
	Number	%	Number	%
Diploma	81	71.7%	40	75.5%
Baccalaureate	32	28.3%	13	24.5%
Post-Basic Baccalaureate (Percent of Diploma Nurses)	18	22.2%	14	35.0%

Table 12

Years of Nursing Experience

	NWT	Yukon
Range	<1 - 39	1 - 35
Mean	12.2	16.6
Standard Deviation	8.20	7.97

Figure 13


Years of Nursing Experience (NWT)
Frequency
30
25
20
15
10
5
0
0 to 4
5 to 9
10 to 14
15 to 19
20 to 24
25 to 29
30 to 34
35 to 39

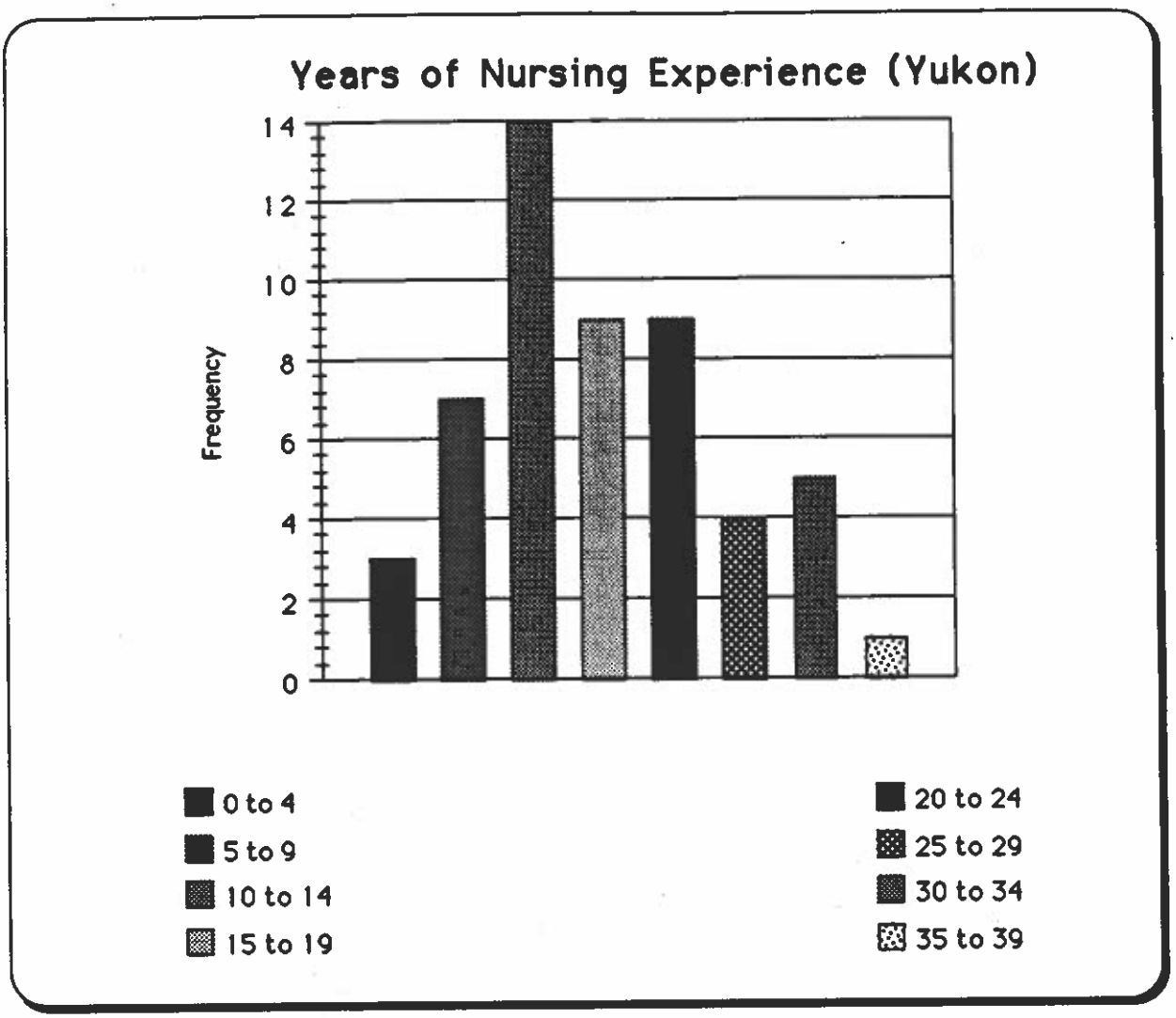


Table 13

Years in Present Position

	NWT	Yukon
Range	<1 - 22	1 - 19
Mean	3.0	4.2
Standard Deviation	3.19	4.20

Employers

Employers were asked to indicate the mix of diploma - baccalaureate nurses whom they employ (see Table 10). In the Northwest Territories, two employers prefer to hire baccalaureate nurses, four employ an approximately equal mix of diploma - baccalaureate nurses, and six employ predominantly diploma nurses. In the Yukon three employers

prefer to hire diploma nurses, and two employ an approximately equal mix of diploma - baccalaureate.

Table 14

Hiring Patterns of Employers

	NWT	Yukon
Predominantly Diploma	6	3
Approximately Equal Mix	4	2
Predominantly Baccalaureate	2	0

CONCLUSIONS

This research to determine content and structure for a nursing diploma program for the Northwest Territories and Yukon Territory was conducted over nine months between September 1992 and June 1993. Questionnaires were developed, based on the curricula of various existing diploma nursing programs; distributed to selected community residents, nurses, and employers of nurses in the Yukon and Northwest Territories; and responses analysed for content and structure requirements for a nursing program.

A critical factor in research of this nature is the return of questionnaires. In a mailed survey, a return of approximately 30% is considered to be quite acceptable. The return rates of the questionnaires in this study varied from 30.5% to 87.5%. The return rate from the communities was high, especially from the Northwest Territories communities. This is due to the efforts of the data gatherers who worked diligently to ensure community participation in this study. The individual mailed questionnaire returns were lower, but nevertheless, very acceptable.

The results of this research are considered to be representative of the community residents and nurses. Although the responses of the employers were very useful qualitatively, there were too few employers to ascertain trends.

This study was designed to answer three questions. The results will be discussed in the context of these questions which guided the entire research.

Structure and Content Components

1. What are the structure and content components which are identified by nurses, employers, and residents of the Yukon and Northwest Territories as being important in the design of a nursing program?

The responses to sections one, two, and three provided information on the content, while section four dealt with structure. Section two required the ranking of optional courses which would assist in differentiating nursing programs. While many respondents reported that all the courses in this section were important, there were trends indicated by the data.

Based on the quantitative and qualitative data, there were four criteria or dominant themes which stood out in the education of nurses. The preferred nurse for the north would be very skilled in interpersonal relations; prepared in primary health care, health promotion and community nursing; but also skilled in advanced clinical nursing in many settings; as well as meeting the standards for nursing in Canada, and prepared for both continued education at the baccalaureate level and lifelong learning.

The necessity for nurses to be skilled at listening, understanding, and communicating with those persons with whom they work, whether patients, colleagues, or community members, was unequivocal. The underlying assumption is that interpersonal relations are the vital component in nursing and the knowledge and skills secondary to this component. One respondent, when recommending a process for the careful selection of students, noted that skills can be learned, but a certain "attitude" might be inherent and not able to be taught or caught during the education process.

Interpersonal relations is the broad category which encompasses such areas as communication of all types, cross cultural issues, ethics, and professionalism. Ethics and professionalism are included in this category because their very nature stipulates interpersonal relations. Without interaction with others there would be no need for either ethics or professionalism. Cultural issues are also dependent on interactions with people, the implication being that all people are not alike in patterns of speech, customs, etc. and knowledge of these patterns provide opportunities to interact effectively with others.

Throughout the responses, comments urged inclusion of a wide variety of topics on interpersonal relations. There is no doubt that a nursing program for the north will need to have major components devoted to interpersonal relations.

Many respondents identified community involvement, community development, primary health care, community nursing, health promotion, and disease prevention as being important to nursing in the north. These areas are seen as being pro-active and long range oriented rather than reactive as in the treatment of illness or disease. The exception is primary health care which incorporates community development, health promotion, and treatment of disease in a comprehensive perspective and implies a multifaceted education incorporating knowledge, skills, and experience in all these areas.

There were numerous mentions of specific topics/activities, such as nutrition or teaching first aid to community residents, which would be encompassed by community oriented nursing. One respondent noted the importance of learning to implement effective methods to promote health and prevent disease. Respondents also noted the importance of collaborative efforts with community members who had specific expertise in areas related to health. Hunters and trappers were recommended to teach about survival, community elders were mentioned frequently as a resource for traditional health practices and knowledge of the community and its history.

The emphasis on communication and community oriented nursing might imply that institutional nursing, including acute care with all its variations, is not important in the north, but such is not the case. There were many responses directed particularly to acute care such as emergency, outpatients, medicine, surgery, and especially to paediatrics, obstetrics, and outpost nursing. The knowledge and skills to care for ill patients, emergent, or chronic, are critical whether in the community or in an institution. People become ill and care of the ill or incapacitated person has always been a part of the nursing role. But the emphasis can be moved from predominantly care of the ill to a broader perspective of primary health care which incorporates caring for the person, family, and community with an emphasis on health rather than illness.

Many beginning nurses seek initial employment in institutions prior to moving to other areas of nursing practice. There is a need to nurse the ill and incapacitated and nurses

need to be proficient in this aspect of nursing practice. Acute and chronic care are important components of nursing education and are an important and logical part of a curriculum which is community oriented.

Although not a content item, the issue of high standards surfaced repeatedly. Respondents indicated they expect a great deal from nurses and their education must prepare nurses to meet those expectations. In addition, some respondents noted that nursing education in the north must be adequate to permit graduates to qualify for registration elsewhere in Canada. Graduates from the nursing program must pass the CNATS (Canadian Nurses Association Testing Service) examinations in order to become registered as a nurse.

The opportunity for graduates of the diploma program to continue their nursing education at the baccalaureate level was considered to be imperative. The move by most jurisdictions in Canada to have the baccalaureate as the entry level to nursing by the year 2000 or shortly after provides further justification for having a northern diploma nursing program articulated with a post-basic baccalaureate in nursing. Such an arrangement ought to be considered as a priority in the development of a nursing program.

There is one further component related to content and that is lifelong learning or continuing education. Changes in health and illness care provision within the context of society require that graduates of a nursing program ought to be prepared for continuous learning. Such preparation is an integral part of the curriculum and must be considered in the early planning stages.

Structure requirements were divided into four categories - program structure, months for study, other persons to instruct, and student supports. In the ranking of program structure, there were three items that dominated - central facility, full time studies, and co-operative program. Many respondents felt that practica ought to be in the communities where possible, but a central facility was recommended, in part, to enhance peer support. There was concern that nursing could not be adequately learned in isolation from peers and instructors, and that the social relations aspect of peer support was crucial. Full time studies were thought important to the retention and use of the knowledge and skills being learned. There was support for flexibility for personal reasons or for those

who are juggling several responsibilities, but concern was expressed that when a program is stretched out over too long a time period, the student may not complete it. Co-operative programming was thought to be an effective way to enable the students to earn money to support themselves and their family as well as to provide the opportunity to experience the realities of nursing and determine whether they wish to remain in the profession. There was some opposition to co-operative education, often based on the history of nursing education when students provided the labour for the hospitals and their education was secondary to the staffing of the institution. These concerns are valid and must be considered carefully if co-operative education is utilized to ensure that a definite distinction is made between co-operative education and service to the institution. On the other hand, given the nature and history of nursing education, there is a precedent and familiarity with the concept of education which combines theory and practice and which may be transferable to the concept of co-operative education. Some respondents recommended that co-operative education experiences could be arranged in the student's home community to enable him/her to combine education and pleasure (family time).

There was much support for a nursing program to be offered during the regular school year. This would enable those students with school aged children to study while their children were also in school. Furthermore, many respondents noted the importance of the summer months for family and traditional activities such going out on the land. The need to co-ordinate the education with the opportunities, particularly for clinical practice was also recommended.

When asked to suggest other people to instruct nurses, many respondents suggested respected elders and traditional healers as potential instructors, although often on a one to one basis. .Doctors were also recommended for a variety of reasons, including their knowledge of pathology and treatment of diseases. There were specifications, by some respondents, on the qualifications of educators which would require university degrees prior to teaching in the program other than as a guest lecturer. The suggestion of community people as guest lecturers was consistent with the desire to have community involvement in both health care and nursing education.

Finally, respondents were asked to suggest supports to help nursing students succeed. Affordable housing, suitable for families; flexible child care, which would suit the hours of nursing classes and practica; and financial assistance such as access to low interest loans, grants, or scholarships were mentioned frequently. In addition, family and community support, peer support, and mentor or preceptor were recommended by a number of respondents.

The trend for community members to name family or community as supports whereas nurses tended to name peers or nurses as supports is quite interesting and perhaps reflects the different perspective of the two groups - social versus professional. If this is so, there is tremendous potential for support for student nurses from both their social group and the professional group into which they are entering. It will be important to ensure that the demands/responsibilities of membership in both groups does not result in conflict for the student.

Similarities

2. How similar are components identified in the Yukon Territory and in the Northwest Territories?

The area covered by the Yukon and Northwest Territories is vast and there was a possibility that there would be regional differences in the components identified by the eastern NWT, western NWT, and the Yukon. The responses in sections two and four were analysed for correlation between responses to ascertain similarity between the regions. Although the correlations obtained in the analysis were not expected to be so high, they provided a strong basis for comparison of the data and of the context of health care in the north. In spite of differences in geography and culture, the history of health and illness care across the north is similar as are the present systems. Until recently the federal government organized and delivered health and illness care services. Nurses have always played a key role in the provision of services in both Territories. In addition, the influence of the media in our lives is no longer restricted by geography. The recent discussions and controversy over the dismantling of our national health care system, the changes in the

respective territorial health care systems and local implications may well have alerted many community residents, nurses, and employers to the issues of health and illness care and of nursing and resulted in a congruous view of nursing education.

The one correlation which was not strong was the ranking of program delivery suggestions by the nurses of the Yukon and Northwest Territories. While both groups ranked central facility and fulltime in positions one and two respectively, the Yukon nurses tended to suggest co-operative education, while the Northwest Territories nurses were more likely to suggest flexible completion time. These differences may well be indicative of differences in the two regions. In the Yukon most nurses work in Whitehorse which has the majority of the population. Co-operative education may be seen to be more workable. In contrast, the flexible completion time which was more likely to be suggested by the Northwest Territories nurses may be indicative of the distances and social organization in the communities there. These differences can be taken into consideration in the planning of the nursing education program.

In general, the high correlations indicate there are few differences in the patterns of responses from the different regions or between the different groups, thus presumably the criteria for a nursing program would be consistent across the north.

Identification of Potential Programs

3. Is there an existing nursing program which includes the identified components or which could be adapted to incorporate the identified components?

Prior to identifying an existing program and the adaptations necessary, it would be prudent to clearly identify the criteria generated by this research and to evaluate the utility of the conceptual model of nursing education.

The model indicates that the goal of nursing education is obtained through knowledge and skills of academics, nursing practice, and social relations. Experience is not explicitly stated but rather implied and this may not be adequate. The acquisition of skills and knowledge in the absence of experience may not be adequate preparation for the

practice of the profession of nursing. The model, therefore, ought to include experience with knowledge and skills as the means whereby nursing education is obtained.

There are two major sections of investigation - content, and structure. Data were organized using the model for nursing education and this model was used to develop a checklist for the evaluation of content and structure of existing nursing education programs.

Criteria for Assessing Nursing Education Program in the North

A. DOMINANT THEMES:

Community Focus

Interpersonal Relations

Acute/Advanced Practice

Educational Directives - National Standards, Eligibility for Baccalaureate Education, Lifelong Learning.

B. CONTENT:

Academics:

Prerequisites for university credit courses

	Knowledge	**Skills**	**Experience**
Anatomy & Physiology			
Growth & Development			
Psychology			
Pharmacology			
Microbiology			
Pathology			

Social Relations:

Interpersonal - major component

	Knowledge	Skills	Experience
Communications - oral, written, non-verbal			
Cross Cultural Studies			
Ethics			
Professionalism			
Community Development			
Personal - minor component			
Self Care & Stress Management			

Nursing Practice:

Nursing

	Knowledge	Skills	Experience
Nursing Process			
Nursing Role			
Nursing Skills			
Traditional Foods & Medicine			
Education/Teaching Skills			
Primary Health Care			
Institutional			
Advanced/Outpost Nursing			
Physical Assessment			
Diagnosis & Treatment			
Mental Illness & Counselling			
Obstetrics & Midwifery			
Paediatrics			
Practical Skills			

Commonweal

	Knowledge	Skills	Experience
Health Promotion			
Disease Prevention			
Community/Public Health			
Substance Abuse Issues			
Violence/Abuse Issues			

Organization:

Variety of clinical settings
University credit courses
High standards of education

C. STRUCTURE:

Program Ideas:

Central facility
Full time
Co-operative education

Months of study:

Jan. - April & Sept. to Dec. (or during regular school year)

Instructors:

Elders
Doctors
Nurses
Qualified persons

Supports:

Housing - Affordable, suitable for families
Child care - Flexible for students' hours, close proximity
Financial - Grants, scholarships, low interest loans

Peer support
Family/community support
Mentor/Preceptor

Program Recommendations

The curricula materials collected during the first phase of the research were assessed using the above criteria. There are many changes underway in the development of nursing practice and consequently in the education of nurses as nursing education program change their curricula to reflect the practice of nursing. The materials upon which the selection has been made were collected in the fall of 1992. Should a program be delayed in start-up at either Arctic College or Yukon College, it would be wise to survey nursing programs available at that time. The criteria developed through this research are generic and can serve as the assessment tool for programs under consideration at the time of commencement of a nursing program at either college provided that the research remains relevant.

While no program encompassed all the criteria, the diploma nursing program at the Okanagan University College seemed to be closest to the requirements for a northern nursing program. The Okanagan program is community focused; has substantial communications components; is articulated with the University of Victoria baccalaureate program which has a health promotion perspective; and strives to promote lifelong learning. The major weakness of the program is the lack of "northern" content. This content would need to be developed locally in the north. In addition, there are some areas identified in the research which are not clearly identified in the program outline and which may need to be augmented or developed - pathology, ethics, cross-cultural studies, community development, self care and stress management, traditional foods and medicines, advanced/outpost nursing, physical assessment, diagnosis and treatment of illness, obstetrics and midwifery, paediatrics, disease prevention, substance abuse, and violence/abuse issues. A decision will need to be made regarding the suitability of each of the suggested content areas (eg. advanced/outpost nursing) for a diploma nursing program.

The Okanagan program and the collaborative program through the University of Alberta had components on primary health care. The Alberta collaborative program

provided some opportunity for community practice but was somewhat more oriented to hospital nursing. The collaborative program should be considered as a potential back up to the Okanagan program.

When considered in relation to the current trends in health care in Canada, the primary health care focus of a nursing program seems right on target. The education of diploma nurses with a view to potential changes in health care delivery would be both visionary and practical.

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APPENDIX A

Questionnaire

I.D. #___-___

QUESTIONNAIRE ON CONTENT AND STRUCTURE FOR NURSING EDUCATION IN THE NORTH

EXPLANATION OF THE QUESTIONNAIRE

This questionnaire is about education for registered nurses. The program is intended for those people in the north who want to become registered nurses (from young high school graduates to mature students with families; aboriginal and non-aboriginal people; males and females). Please keep the range of potential students in mind when completing the questionnaire.

SECTION ONE

The courses all student nurses must take (required courses) are listed in Section One. These will not change, but you will have a chance to comment on them.

SECTION TWO

Each nursing program has other courses besides the required courses. The ones listed in Section Two are taken from other nursing programs as examples. When you get to Section Two, choose the ones you think are important in the north.

SECTION THREE

You may have some good ideas about topics or courses for a nursing program. Section Three will give you a chance to list them.

SECTION FOUR

In Section Four you will find ideas for organizing the nursing program. You can help with the organization by showing which ideas you think would be useful.

SECTION FIVE

Section Five deals with you as the person doing the questionnaire. Your name will not be used in the report, but the information will be helpful in preparing the report and planning for the nursing program.

There are a few more points about nursing programs which are important to know. These points are listed below.

In nursing programs, some courses do not change. There will be **entry requirements** for those courses. This means that students will have to meet some standards of education before taking those courses.

Students may have to take some courses to raise their level of readiness before they can take the more difficult ones. The courses they need to take first are called **prerequisites.**

Students will have to do some **clinical practice** (practical "hands on" work) in different places during the program. This will give them a chance to use their knowledge and skills.

Each course will have some **criteria** (knowledge and skills to be learned by the end of the course). Students will be tested on their knowledge and skills to see if they match what is needed for the job before the program is completed. Each course will have some **criteria** and the whole program will have its own **criteria.** This will ensure that we will have skilled, knowledgeable people working as nurses in the north.

**A little reminder (like the box below) will be on each page of the questionnaire to remind you of the things you have just read.

Reminder: Entry Requirements; Prerequisites; Clinical Practice; Criteria for Completion.

Reminder: Entry Requirements; Prerequisites; Clinical Practice; Criteria for Completion.

SECTION ONE

LIST OF REQUIRED COURSES AND DESCRIPTIONS

COURSE	DESCRIPTION OF THE COURSE
Anatomy	the parts of the body
Physiology	how the body works
Development	how people grow and change from birth to old age
Communication	ways of listening and talking with patients and helping by listening
Psychology	how people behave and why
Nursing Process	how nurses decide how to help each patient
Nursing Role	professional responsibilities and behaviour
Nursing Skills	skills nurses use
Pharmacology	drugs and how they act on the body
Microbiology	micro-organisms (germs) and how to control them
Pathology	diseases and their treatment
Ethics	morals, values, beliefs, and conduct in nursing
Professionalism	knowing, assessing, accepting, and acting in agreement with the goals, and processes of nursing

Please use these lines or the back of this page to comment on the above courses (if desired). For example, you may think that there are certain aspects to emphasize for nursing in the north.

SECTION TWO

Look at this list and choose the ones that you think are most important for nurses working in the north. Number your choices. #1 is the most important, #2 is next , and on to #19. Number 19 is the course you feel is least important.

COURSE	DESCRIPTION OF THE COURSE
____English	reading English books, poems etc. and writing letters, papers, reports, etc.
____Mathematics	using numbers and arithmetic in nursing practice, including calculating dosage of medicines
____Sociology of the Family	the family and its roles in society
____Introductory Sociology	how people group themselves in society
____Cultural Issues	learning about cultures and awareness of differences
____Canadian Social Issues	current Canadian events and trends and how they affect people in relation to health and nursing care
____Teaching and Learning	how people learn and how to teach them
____Nutrition	food and how it affects our health
____Fitness	activity and exercise and how they affect health
____Change Process	dealing with changes and the effect of change on people and groups
____Health Care System	how the Canadian system of health and illness care works
____Concepts of Health	what health means in the eyes of different people
____Nursing Theories	organized ideas about nursing and the people who developed these ideas
____Research in Nursing	using other research findings or doing studies to find ways to improve nursing and help people in better ways
____Leadership	what is expected of leaders and followers and learning about leadership styles
____History of Nursing	important people and events in nursing
____Health Promotion	ways people stay healthy and how to encourage these healthy habits
____Continuity of Care	providing ongoing care from home to hospital to home (community/home care)
____Primary Health Care	encouraging co-operation in sharing knowledge and skills by residents in the provision of essential health care in a manner determined by the community, the territory, and the country and which they can afford over the long term and having an emphasis on the promotion of health

Reminder: Entry Requirements; Prerequisites; Clinical Practice; Criteria for Completion.

SECTION THREE

In this section, suggest anything that you think in important for nurses to know or practise (for example, skills, knowledge, topics, or courses). You might think of some things which haven't been listed or things you think are very important and need a lot of time spent on them. This will help the organizers to plan the nursing program. If you need extra space, write on the back of this page. All your suggestions are valuable.

SECTION FOUR

A) PROGRAM IDEAS

Look at the following list of ideas for how the nursing program could be made available. Choose the ones you think are most important. Number your choices. #1 is the most important, #2 is next , and on to #7.

IDEA	DESCRIPTION
___ Distance Education	some courses might be offered to students doing these courses at home by written correspondence (mail) courses, TV, teleconference (phone), videotapes, or several of these.
___ Local Courses	some courses might be offered in home communities.
___ Central Facility	courses might be offered in a central place, for example, Whitehorse for the Yukon and Yellowknife or Iqaluit for the Northwest Territories.
___ Full Time	students would study full time until graduation
___ Part Time	students would have a choice of studying part time.
____Flexible Completion Time	the program would be organized so that students could take courses at their own pace within a period of time decided by the planners.
___ Co-operative Education	students learn in the classroom, then practise those skills and get paid for the work they do before returning for further study.

B) MONTHS FOR STUDY

Circle the months you think students would like best for taking courses.

January	May	September
February	June	October
March	July	November
April	August	December

*Write <u>your</u> ideas about these suggestions. Add ideas if you wish. If you need more room, use the back of this page.

_____

_____

_____

_____

_____

C) TEACHERS FOR NURSING STUDENTS

Usually registered nurses teach nursing students. Who else in your community do you think should be involved in teaching nursing students and why? List them on the following lines. If you need more room, use the back of this page.

Person: _____

Reason: _____

_____

Person: _____

Reason: _____

_____

D) SUPPORTS FOR NURSING STUDENTS

Nursing students want to succeed! What do you think they need to help them succeed? Some examples might be: help with places to live, child care, and transportation expenses. Write your ideas on the lines below. If you need more room, use the back of this page

Support: _____

Reason: _____

_____

Support: _____

Reason: _____

_____

SECTION FIVE

Circle the categories that tell your age, gender, and ethnicity (background). This information is for planning purposes. You do not need to put your name on the questionnaire. Remember, names will not be used in the report.

AGE	GENDER	ETHNICITY
Under 50	Male	Aboriginal
50 or more	Female	Non-Aboriginal

Thank you for completing this questionnaire.

C) TEACHERS FOR NURSING STUDENTS

Usually registered nurses teach nursing students. Who else in your community do you think should be involved in teaching nursing students and why? List them on the following lines. If you need more room, use the back of this page.

Person: _____

Reason: _____

_____

Person: _____

Reason: _____

_____

D) SUPPORTS FOR NURSING STUDENTS

Nursing students want to succeed! What do you think they need to help them succeed? Some examples might be: help with places to live, child care, and transportation expenses. Write your ideas on the lines below. If you need more room, use the back of this page

Support: _____

Reason: _____

_____

Support: _____

Reason: _____

_____

SECTION FIVE

Circle the categories that tell your age, gender, and ethnicity (background). This information is for planning purposes. You do not need to put your name on the questionnaire. Remember, names will not be used in the report.

AGE	GENDER	ETHNICITY
Under 50	Male	Aboriginal
50 or more	Female	Non-Aboriginal

Thank you for completing this questionnaire.

(ADDITIONAL SECTION FOR NURSES)

SECTION SIX

A) Please circle the category which indicates your basic (initial) education in nursing.

Diploma Baccalaureate

B) On the following lines, please list additional nursing education which you have completed.

_____

_____

C) How many years of nursing experience do you have? _____

D) Are you presently employed in nursing? If "yes", what is your present position? _____

_____

E) How many years have you been in your present position? _____

Thank you for completing this questionnaire.

(ADDITIONAL SECTION FOR EMPLOYERS OF NURSES)

SECTION SIX

A) For which settings do you employ nurses? Please indicate on the lines below for each applicable category.

i) an institution (i.e. hospital, nursing home, etc.)?

_____

ii) the community (i.e. public health, home care, etc.)?

_____

iii) other (please indicate)

_____

B) Do you employ only diploma educated nurses?
baccalaureate educated nurses?
both? (Please indicate the approximate ratio or percentage of each on the lines below)

_____

_____

_____

Thank you for completing this questionnaire.

APPENDIX B

Selection Grids

Northwest Territories Community Selection Grid

Communities will be selected from each of the five regions on the basis of population. Since all the data from the 1991 census are not yet available and are not scheduled for release until 1993, the figures used as a basis for this grid will be the 1990 NWT Bureau of Statistics information. (The population ratios by region are the same as those from the 1991 census data.)

Region	% of Pop'n.	# of Comm. to Survey
Baffin Region	20.0%	4
Keewatin Region	10.2%	2
Kitikmeot Region	7.8%	2
Inuvik Region	14.5%	3
(Fort Smith Region)	(47.4%)	
Fort Smith Region excl. Yellowknife	22.0%	4
Yellowknife	25.4%	5

Baffin Region - 4 communities

1. Iqaluit
2. Igloolik, Cape Dorset, Pangnirtung, or Pond Inlet
3. Arctic Bay, Broughton Island, Clyde River, Hall Beach, Lake Harbour, or Nanisivak
4. Sanikiluaq or Grise Fiord

Keewatin Region - 2 communities

1. Baker Lake, Arviat, or Rankin Inlet
2. Chesterfield Inlet, Coral Harbour, Repulse Bay, or Whale Cove

Kitikmeot Region - 2 communities

1. Cambridge Bay, Coppermine, or Gjoa Haven
2. Spence Bay, Pelly Bay, or Holman

Inuvik Region - 3 communities

1. Inuvik
2. Aklavik, Forth McPherson, or Tuktoyaktuk
3. Arctic Red River, Fort Franklin, Fort Good Hope, Fort Norman, Norman Wells, Paulatuk, or Sachs Harbour

Fort Smith Region - 4 communities

1. Fort Simpson, Fort Smith, Hay River, or Rae-Edzo
2. Detah, Fort Liard, Fort Providence, Fort Resolution, Hay River Reserve, Lac La Martre, Rae Lakes, Snare Lakes, Snowdrift, or Wrigley
3. Enterprise, Jean Marie River, Kakisa, Nahanni Butte, Paradise Gardens, Reliance, Salt Plains, or Trout Lake

Choose two communities from Group 2

Yellowknife - 5 communities (i.e. 50 respondents from Yellowknife)

It would be preferable to have respondents from as broad a cross-section as possible, keeping in mind the age/gender/aboriginal status criteria.

Yukon Community Selection Grid

Communities will be selected from each of the five regions on the basis of population. Since all the data from the 1991 census are not yet available and are not scheduled for release until 1993, the figures used as a basis for this grid will be the 1990 Yukon Bureau of Statistics information.

Region	% of Pop'n.	# of Comm. to Survey
North Highway	3.0%	1
Southeast	5.4%	1
North, North/Central	9.4%	1
East	8.0%	1
Southwest	1.5%	1
Whitehorse	70.6%	7

North Highway - 1 community

1. Haines Junction, Burwash Landing, or Beaver Creek

Southeast - 1 community

1. Watson Lake or Upper Liard

North, North/Central - 1 community

1. Old Crow, Dawson, Pelly Crossing, Mayo, or Elsa

East - 1 community

1. Faro, Ross River, or Carmacks

Southwest - 1 community

1. Carcross or Tagish

Whitehorse - 7 "communities" (i.e. 70 respondents from Whitehorse)

**It would be preferable to have respondents from as broad a cross-section as possible, keeping in mind the age/gender/aboriginal status criteria.

Alternately, it would be possible to select communities in the Yukon on the basis of size alone. There are four groupings (excluding Whitehorse) which present themselves.

Group 1	(>1000)	
	Dawson City	1786
	Faro	1565
	Watson Lake	1624
Group 2	(400 - 999)	
	Carmacks	437
	Haines Junction	628
	Mayo	478
	Teslin	465 * (selected for the pilot)
Group 3	(200 - 399)	
	Carcross	359
	Old Crow	266
	Pelly Crossing	243
	Ross River	389
Group 4	(.199)	
	Beaver Creek	110
	Burwash Landing	91
	Destruction bay	58
	Elsa	37
	Tagish	90

APPENDIX C

Data Gatherers

Lawrence Tarasoff	Fort Liard
Kathryn Brule	Fort Resolution
Freda Cardinal	Fort Resolution
Barb Tetso	Fort Simpson
Lori Campbell	Rae Edzo
Irene Tanuyak	Chesterfield Inlet
Joy Suluk	Arviat
Kate Bishop	Igloolik
Selina	Igloolik
Mike Stenfors	Broughton Island
Bernie Hughes	Sanikiluaq
Dorothee Komangapik	Iqaluit
Irene Sharkey	Fort McPherson
David Speakman	Fort Franklin
Mike Kelly	Inuvik
Elizabeth Hadlari	Cambridge Bay
Mike Hanuschuk	Taloyoak
Jan Inman	Yellowknife
Mary Goulet	Yellowknife
Bertha Goulet	Yellowknife
Nora Sangris	Yellowknife
Ruth Sutherland	Yellowknife
Ida Calmegane	Carcross
Sharon Kabanak	Burwash Landing
May Bolton	Ross River
Shirley Lutz	Watson Lake/Upper Liard
Dennis Peter	Mayo
Viola Papequash	Whitehorse
Lorraine Hoyt	Whitehorse
Ray Savard	Whitehorse
Hilda Toews	Whitehorse
Chris Refshauge	Whitehorse
Susan Roberts	Whitehorse
Patricia McClelland	Whitehorse

APPENDIX D

Procedures for Data Gatherers

NURSING EDUCATION IN THE NORTH

IDENTIFICATION OF CONTENT AND STRUCTURE REQUIREMENTS FOR A NURSING DIPLOMA PROGRAM IN THE YUKON TERRITORY AND THE NORTHWEST TERRITORIES

RESEARCH GUIDELINES FOR DATA GATHERERS

JANUARY 1993

****It is very important that you keep the information from the questionnaire confidential. Do not talk about it with other people in the community. We want the people who fill in the questionnaire (respondents) to give their own ideas and not just ideas they got from talking to other people in the community about the questionnaire.**

INTRODUCTION TO THE RESEARCH

Purpose of Research

The purpose of research is to look carefully for the answer to a specific question. Research means "to look into something carefully " or "to examine something in detail". In order to do this, there are certain procedures that must be followed so that the findings or results are useable.

Suppose, for example, we wanted to know which community in the Northwest Territories and the Yukon had the coldest weather. Our research question is quite obvious - "Which community in the Northwest Territories and the Yukon Territory has the coldest weather?"

In order to answer the question, we could start by examining records kept by various groups, including the Weather Service. But we might want to check on the temperatures ourselves. We could ask someone in each community to check the temperature every day for a year. We could buy thermometers that are all the same and that measure temperature in exactly the same way. We could give each "temperature checker" a thermometer and ask them to place it on a post outside, away from any buildings, and to check it at 8 a.m. every morning.

But imagine what would happen if some "temperature checkers" placed the thermometer just outside the window of their house so they wouldn't have to go outside. Some "temperature checkers" kept theirs in the house and just stuck it out the door for a moment each day at 8 a.m. Other "temperature checkers" liked to sleep in and didn't check the thermometer until 1 p.m. each day. And some "temperature checkers" accidentally broke their thermometers and decided to use one form the local store, even though it was different from the one provided for the research. How accurate would the results of the research be?

It is very important that everyone use the same procedure when gathering the data.

The following sections contain information on this research. The statement of the problem to be solved, the research questions, and the definition of some terms used in this research are included so you are familiar with this research project. The job description for the data gatherers, and the procedures we will use for this research provide the instructions for gathering the data.

STATEMENT OF THE PROBLEM

The feasibility of a nursing education program has been determined for both the Yukon and Northwest Territories. What is lacking, however, is a knowledge of the specific content and structure of a nursing program which will prepare nurses for the unique and varied settings in which they will be employed.

The purpose of this study is to identify the content and structure for a nursing diploma program which would be suited to the needs of the Yukon and the Northwest Territories; to evaluate the similarity between and within the territories; and to identify any existing programs which would be readily adaptable to include the identified content and structure.

RESEARCH QUESTIONS

1. What are the structure and content components which are identified by nurses, employers of nurses, and residents of the Yukon and Northwest Territories as being important in the design of a nursing program?

2. How similar are components identified in the Yukon Territory and in the Northwest Territories?

3. Is there an existing nursing program which includes the identified components or which could be adapted to incorporate the identified components?

DEFINITIONS

Data	Data are all the information which are collected. In this research data are the completed questionnaires.
Confidentiality	Confidentiality means keeping information secret, not sharing with anyone except the persons who are supposed to know.
Voluntary	Voluntary means doing something because you want to and not because someone is forcing you or pressuring you to do it.
Respondents	Respondents are the people who answer the questionnaires.
Random	Random means that something is not planned out in advance.
Research Questions	These are the questions which the research is designed to answer. They are included in the research proposal which is in your package.

JOB DESCRIPTION

Data gatherers are people in the community who are familiar with the community and its residents, and who are interested in learning about and participating in health research.

Data gatherers will:
1 participate in the training session for data gatherers
2 identify respondents in their community based on the outline provided by the researcher
3 collect the data in the community, delivering the questionnaires and assisting with reading and writing, where appropriate
4 resolve questions in the community according to instructions provided in the training session or contact principal researcher for further information
5 return questionnaires to the principal researcher
6 assist in sharing information from the completed research with community members
7 share in the joy of a job well done!

PROCEDURES

****It is very important that you keep the information from the questionnaire confidential. Do not talk about it with other people in the community. We want the people who fill in the questionnaire (respondents) to give their own ideas and not just ideas they got from talking to other people in the community about the questionnaire.**

1 Participate in the training session for data gatherers.

a) This information package will be sent to each data gatherer before the training session. You are expected to read it and be prepared with your questions and suggestions for the training session.

b) The training sessions will be by telephone conference in the NWT. In the Yukon, some of the sessions will be in person during the Health Conference. You will be notified of the date and time of the session for you. There will be approximately 5 to 8 persons on each teleconference. This is your chance to ask questions. If you are not sure of something probably there are others as well who aren't sure. So ask anything about the research.

c) If you have further questions after the teleconference, or you think of something after, call me at 668-4976 (home number) or 668-8832 (work). I do quite a

bit of my work at home, so you may find it easier to reach me there. Feel free to call in the evenings as well as any time during the day.

2 Identify respondents in their community based on the outline provided by the researcher.

a) As part of your training package, you will receive a grid or chart which will indicate the categories of people (based on age, gender, and aboriginal status) you will ask to complete the questionnaire in your community. Please note that the category "aboriginal" includes all aboriginal groups including Metis people.

b) You will select people (according to the grid) from your community to complete the questionnaire.

c) You may ask for suggestions from others in the community as you select respondents.

d) You will ask people selected in your community if they will participate in the research and fill in the questionnaire.

e) If someone does not wish to participate, select another person with similar characteristics and ask that person whether he or she will fill in the questionnaire.

3 Collect the data in the community, delivering the questionnaires and assisting with writing, where appropriate.

a) Bring a questionnaire to each person who agreed to respond. Include in your bag an extra questionnaire, these instructions, and a pen or pencil.

b) If the respondent is not familiar with reading or writing in English, offer to assist.

c) You may read the questions to a respondent if he or she understands English.

d) There will be a tape of the questionnaire translated into the different languages and dialects. You may play the tape for the respondent, stopping for each question or replaying parts of the tape as the respondent asks.

e) If the respondent would like assistance in writing, offer to do the writing for the person.

f) There are no right or wrong answers. We want to know what the respondents think. So if a respondent asks you for the answers, you should say that we want to know what they think. If the respondent does not want to answer a question, that is fine. Just leave it blank.

g) If the respondent does not need any assistance, you may leave the questionnaire. Arrange a time, either the same day or the next day to pick it up.

4 Resolve questions in the community according to instructions provided in the training session or contact principal researcher for further information.

a) There are sure to be questions which come up during the research. Please be sure to follow the basic procedures set out. If there are further questions, feel free to call me (Pat) at (403) 668-8851 or at my home number of (403) 668-4976.

b) If there is an unusual question or situation and you are able to handle it, please write me a note describing it and how you handled it. Include the note with the questionnaires when you return them.

5 Return questionnaires to the principal researcher.

a) The questionnaires will be mailed with a pre-paid addressed envelope. Once you have collected all your questionnaires, put them in the envelope, seal it, and mail it.

b) Then sit back and relax until the report has been prepared.

6 Assist in sharing information from the completed research with community members.

a) Once the report is ready, a copy will be sent to you. It is a public report and does not have to be kept private. In fact, we want everyone to know about it!

b) Please share it with your local council, the respondents, and any other people who are interested in the research.

c) You might want to share it with local newspapers and communities that weren't involved in the research.

7 Share in the joy of a job well done!

a) The completion of research is always a time to realize that we can look into something carefully and find some answers to our questions.

b) Update your resume and add that you were part of a research project as a data gatherer.

Some of you may wish to share your own ideas about a nursing program. As data gatherers, you are not eligible to participate in the research. Nevertheless, you are eligible to write me a note telling me your ideas. You may wish to use one of the extra questionnaires to record your ideas. If you do so, please write "Data Gatherer" on the top so I know to separate it from the respondents. I will incorporate your ideas into a report for Arctic College and Yukon College.