ASSESSMENT OF EDUCATION NEEDS OF HEALTH EDUCATORS IN MANITOBA

by
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DEDICATED TO

MOM & DAD

MR. SAMUEL OGBONNAYA NGWE

&

MRS. ELOM NGWE (NEE OGBO ELOM)

ABSTRACT

This study was designed to seek answers to the following research questions: (1) What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by health educators and administrators in charge of employing health educators? What is the relative importance of these competencies? (2) What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by health educators and their administrators? What is the relative importance of these competencies? (3) To what extent do these priorized competencies differ between health educators and their administrators, and in terms of their practice settings, levels of experience, and category of competence statement?

The design of the study followed a descriptive survey pattern and employed a written questionnaire technique. The items selected for the instrument were primarily obtained from and categorized according to the report of the Bureau of Health Education (1980) and several other research studies. A two-part questionaaire was developed for this study. Items in part one of the questionnaire were grouped into five categories: communication; needs assessment; planning; implementation; and evaluation. Part two sought general demographic data, that is, information descriptive

of selected personal and professional characteristics. The instrument was validated using the content validity approach.

To collect the data, the questionnaires, along with a transmital letter explaining the purpose of the study, were mailed to 51 health educators and administrators in Manitoba who were asked to rate each of the 29 items on the instrument on a five-point Likert type scale in two ways: (1) its importance in the performance of health education activities; and (2) its importance as a need for in-service training of health educators. Thirty-eight usable questionnaires were returned for a a response rate of 75%.

Demographic data showed that the educational levels, job descriptions, and fields of specialization of health educators in Manitoba varied widely, but the majority (86%) were recipients of Bachelors degrees or higher. These results further showed that 90% of health educators and administrators felt that in-service training was "very much necessary" to keep up-to-date in their areas, and 82% indicated they would "most certainly" participate in such programs.

Selected comparison of responses indicated no major differences between the perceptions of health educators and administrators regarding the competencies needed by health educators to perform health education activities. However,

these perceptions differed regarding the in-service training needs of health educators.

Selected comparison of responses between health educators and administrators with respect to practice settings, levels of experience, and category of competence statement were similar regarding the importance of the statements for health education activities, but differed on the importance of the statements for in-service training needs of health educators.

In view of the major findings and conclusions of this study, it was recommended that the findings of this study be incorporated in the assessment or re-assessment of the graduate, undergraduate, and continuing education curricula in health education in Manitoba; that these findings be utilized as a basis for designing in-service training programs for health educators; that a single cohesive professional association be established to identify, register, and represent all health educators in Manitoba; and that further studies delineating many of the areas addressed in this investigation be undertaken periodically in Manitoba to assure the identification of more needs and expectations of health educators in continuing professional developments.

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CHAPTER ONE

INTRODUCTION

In Canada, historically speaking, the primary responsibility for education and health was delegated to the provinces by the British North American Act of 1867. The Federal Government, however, can, and does make funds available to its provincial counterparts through the federal department of health to promote health and to provide Canadians with the most up-to-date health information. In the early days of Canada, this responsibility rested exclusively in the realm of medical practice. It was the medical practitioner who, while administering treatment, also dispensed advice to individuals and groups (Palko,1967). Nearly all health activities associated with medical practitioners' functions consisted of doing things to and for people.

The efforts of the physicians and health agencies of the early post-confederation period were mainly concerned with the control of communicable disease and epidemic conditions; the control of these was usually accomplished by proper sanitation, provision of physical facilities and enforcement of regulations related to immunization and vaccination. It was not until after the World War I years, that individuals and groups became interested in the ways and means of preventing diseases and the promotion of individual and community health practices. The individual's need for health information and advice was met by the family physician, but the need for scientifically sound information on a wide scale persisted. This need for new health knowledge and its incorporation into the educational

activities of the home, school. church and community gave rise to several important channels through which health education has continued to be disseminated through to the present time. It is conceivable also, that this need may have been responsible for the demand for health educators.

One of the essential differences between health education of the public and the counselling as carried on by the physician in his office, lies in the number of people involved. The public health educator usually deals with groups of people, and as a result, the techniques he uses must be adapted to these larger audiences (Burnett,1967). In the United States, perhaps in Canada as well, the trend was to train persons in physical education, then expose them to sufficient health materials. These individuals, with dual certificates so to say, were regarded as both physical educators and health educators. Their curriculum consisted mainly of personal hygiene and physical education.

The education concept of "doing things to and for people" was to undergo a radical change in the mid-1900s, because of the advances in social sciences and in such areas as the motivation of behavior, theories of learning, working with minority groups, group processes, facilitating learning and group productivity. This radical change went from "doing things to and for people" to "helping people to help themselves". This change also led to the redefinition of health education. At the present time, health education has been defined in many ways. For the purpose of understanding how the health educator contributes to the health of the public, health education in this study was defined as a process that enables people, acting individually and collectively, to make and act upon informed decisions about

matters affecting their personal, family and community health (Henderson and McIntosh, 1981; Bureau of Health Education, 1980; and World Health Organization, 1979). The health educator was logically defined as an individual who facilitates the process of health education.

Francis Sgro and Micheal Palko (Sgro and Palko, 1982) narrated the emergence of health education in Canada. They indicated that the last 20 years of health education in Canada have seen a maturing of the relationship between health education and the role it plays in public health. In the 1960s, the field was in its infancy and still too young to handle all its challenges. Then came the 70s and Marc Lalond's *A New Perspective on the Health of Canadians*. This classic report suggested, perhaps for the first time, that lifestyle factors should be an important focus on reducing the prevalence of health problems. In the 1980s, the positive direction that Lalonde set in motion on a national level is trying to take root at the grass roots level (Sgro and Palko, 1982). Today, health educators are expected to assume a greater role, perhaps as an offspring of Lalonde's document: they have to identify target populations for interventions, and to assess health-related knowledge, attitudes, practices, beliefs, and trends that may affect the educators' efforts to restore, maintain and promote health (Weinstein, 1983)

Sgro and Palko (1982) indicated that there is a certain degree of self-satisfaction in the field of health education because the role of the health educator has gone beyond that of providing information to that of influencing the behavior of people "when there is sufficient evidence that such behavior is harmful to health (p.3)". Sgro and Palko (1982) deplored the

fact that health education in Canada was left to chance in the past. They stated:

> It appears that, for too long...we have approached the education of the community for health lightheartedly, without the systematic assistance of trained specialists; without research and evaluation of effects on people; and without the adequate application of principles of education and social sciences to health work (p.6).

The skills needed in health education have been in rapid transition over the past ten years. This has placed considerable demands on persons in the field which must be addressed through continuing professional education.

BACKGROUND TO THE STUDY

Health educators in Manitoba, and indeed in Canada, exhibit a variety of educational backgrounds: physical and health education, health science, community health promotion, community nursing, education, liberal arts, home economics or human ecology, nutrition, and health education. Some health educators have more rigorous academic preparation in the social, behavioral, and natural sciences. Others have a strong professional preparation which could make them more able in planning, coordinating, and implementing needed health education programs. And yet others are better prepared in information retrieval, organization and use. Manitoban health educators reflect this diversity, consisting of teachers, nurses, nutritionists, dentists, pharmacists, and civil service personnel, among

others. Many of these individuals admit, at least informally, that health education is neither their principal responsibility, nor their major area of specialization, and that they often assist others to fulfil their health education functions.

The practice settings of health educators in Manitoba, and in Canada, are likewise varied: government and health departments, foundations, associations, colleges and universities, counselling and medical centers, Health and Welfare centers, private enterprises, community organizations, and education. William Shannon and Wayne Mitic (Shannon and Mitic,1980) summarized these functions rather nicely when they stated that:

> the Canadian community health educator is seen as a public relations person, a resource person to schools or groups, an in-house educator for other health professionals, a curriculum developer, researcher, epidemiologist, writer, conference organizer, and fund raiser (p.6).

Speaking about the variations in educational backgrounds and practice settings of health educators in the United States, almost in comparison to their Canadian counterparts, Henderson and McIntosh (1981) stated that health educators (in the United States) apply their skills in many diverse settings at local, state, national and international levels. These settings include schools and colleges, voluntary and tax-supported agencies, hospitals and other medical facilities, and a variety of community settings including business and industry and health planning agencies.

Health educators must employ a wide variety of educational methods and techniques to meet the needs of specific target populations. Techniques

and tools used to provide health education services include personal counselling, the mass media, a variety of instructional skills, group process skills, community organization and development strategies, and a range of other educational methods. In a situation where the general public is the target for health information, the health educator makes use of whatever resources are available. Health education often takes the form of community action programs, based on the principles of community organization. Here the emphasis is on involvement of individuals in the community in identifying local health problems, organizing themselves, planning for community action, and seeing that such action is carried out. Cady (1972) summarized these techniques by stating that:

> the health educator considers the motives of the people, their goals, their values, and cultural environment. He plans in terms of the relevant knowledge, experience, understanding, skills, and attitudes of the persons and groups whose practices are to be affected. He involves people in helping themselves in the direction of improvement. This involves motivation, communication, and decision-making (p.80).

Despite this variety in educational backgrounds, perceived functions, and practice settings, preparation standards and credentialing mechanisms do not exist in health education in Canada (only the colleges and universities from which health educators graduate proclaim their readiness to conduct health education activities). Shannon and Mitic (1980) concluded that many health-related agencies in Canada are just beginning to realize the

knowledge and skills that are necessary to carry out the functions of a qualified health educator. To further bring to light this lack of preparational standard in Canada Beazley (1984a) stated that:

> a process of providing health educators with valid, acceptable credentials does not exist. Practitioners are not specifically registered, certified, or licensed, and what is more, practice is based on myriad of education and experience backgrounds and personal belief (p.5).

Rubinson and Alles (1984) pointed directly to the basic problem in designing professional development programs: that of determining an adequate standard of competency which can be equally applied to all members of a profession. In Canada, with respect to the health education profession, the concern is basically that of searching for a method of updating or upgrading the competencies of those who are already working in the field (since their educational backgrounds vary widely) than formally preparing those who wish to enter the field of health education (Shannon and Mitic,1980). All too often in professional preparation, individuals are trained with little or no regard to the actual skills that are necessary to do the job. Briefly stated, competence is the possession of an acceptable level of skill or proficiency required to carry out an activity (Rubinson et al 1984).

Most health educators of their own volition strive to maintain their competence. They do so out of enlightened self-interest and out of a desire to provide high quality service to the public. However, not all health

educators keep up to date: some of them, perhaps a majority, feel they can get by with what they learned in school years ago. This might well be, but Toffler(1970) indicated that the obsolescence of knowledge makes it clear that skills learned in youth are unlikely to remain relevant by the time old age arrives. We can rephrase this statement when speaking of health educators, and say that unless there is an educational process which builds upon and/or modifies previous experiences of health educators, their competencies are unlikely to remain relevant for more than a few years. In the view of Ruhe (1982), "continuing education is (or should be) a basic tenet of every profession that its members strive constantly to improve their knowledge and performance (p.8)". More than ever, knowledge in the health field is expanding at an incredible rate, and keeping current to say nothing of getting ahead, is becoming increasingly difficult.

Mcleish (1970) made the point that unless a health educator is a very recent graduate, and in many cases even then, he or she may be a product of an undergraduate curriculum seeminly constructed on the assumption that a degree course lasting four or five years will equip him or her for forty years of practice in a rapidly changing field. The point being conveyed here is that the nature of the professional training or preparation of the health educator is usually determined, to a large degree, by such factors as the philosophy, program goals, and the particular theory of health behavior change held by those who plan and administer the program. The investigator contends that in order to provide high-quality health education services, health personnel require relevant in-service training programs. These programs should be based, at least in part, on currently identified needs of health educators and

partly on the goals and philosophies of the agency.

The Bureau of Health Education (1980) indicated that in the face of increasing expectations for health education as an effective strategy for promoting the public's health:

> the need intensifies to define what the entry-level health educator should be able to do, and what the prospective employer should look for in hiring a health educator, and what standards, in both preparation and demonstrated competence, can help assure that these expectations are met (p.1)

Individuals and professional organizations in the United States, and to a lesser extent in Canada, have been actively engaged in developing lists of competencies that aspiring candidates in training institutions must achieve (Galli,1978). The Bureau of Health Education (1980) agreed with Galli and revealed that for several years, professional health education organizations have been concerned with developing standards for preparation and practice of health education. However, while these standards have been useful, they have been prepared under the auspices of different organizations by individuals with different definitions of professionally prepared health educators. The problem with this approach is that the individual's education needs (in this case health educator's) are either completely ignored or overshadowed by the expectations of their professional organizations. According to The Bureau of Health Education (1980), until recently, there has been no mechanism for collaboration on standards. The lack of collaboration resulted in fragmentation of preparation programs for health educators. In Canada, with the provincial autonomy for education and health,

this problem of fragmentation is even more acute, but at least on a provincial level, this collaboration should be feasible.

In 1974, the Society for Public Health Education (SOPHE) developed a set of guidelines for the preparation and practice of professional health educators in response to the forces felt to be influencing health education (SOPHE,1977). The purpose of the guidelines included: to provide new and relevant directions for the preparation and practice of the master's level health education specialist; to serve the field of health education as a guide for the development of curriculum for more adequate preparation, as well as a guide for practice, by the professional health educator; and to serve also as a partial basis on which the accreditation of health education teaching programs could be based, or as a basis from which national certification could be developed.

Shannon and Mitic (1980) reported a survey that was designed to determine the current status of the Canadian community health educator. (This study was nation wide). They asserted that community health education, "the nebulous art of educating specific populations through a variety of strategies", appeared to exist in Canada in many forms and with many perceived functions. They also found that the academic backgrounds of those persons designated as health educators varied considerably showing "enormous inconsistency in preparation, philosophy and, no doubt, job expectations (p.7)". They suggested that an innovative program of studies in community health education would be a welcome addition to the Canadian academic scene.

The Ontario Ministry of Health (1986) has defined the role of the

Ontario health educator, and indicated that increased effectiveness and efficiency in education programming are among the principal advantages of having at least one position in a health agency dedicated to the health educator. This document contends that a collaborative approach is central to the role of the health educator, that is, health educators work in collaboration with other staff in the agency to facilitate the development of effective educational strategies and programs. Health educators offer consultation on program development for health education and work closely with members of the public to develop materials to use to educate and assess knowledge of school children and adults.

The five main areas of responsibility for the health educator according to the Ontario Ministry of Health document include: (1) Needs assessment: this involves the identification of health education needs of target populations and also the collection of information about existing services and programs related to health issues under study. Needs assessment should be conducted with staff to determine their requirements for input from the health educator. This initial step in planning a health education program is usually done in co-operation and consultation with other members of staff. (2) Program planning for health education: this is an extension of the needs assessment step, and involves establishing clear, concise, and measurable objectives, budgeting, resource allocation, and developing funding proposals. The health educator can sometimes play the role of consultant or catalyst in this process, but should be done in consultation with the recipient of the programs. (3) Resource development and coordination: this includes identifying and acquiring or producing needed

educational materials and resources. (4) Implementation/communication for health education: health educators, particularly those employed in small health agencies, directly participate in program implementation, that is, actual delivery of health education programs. (5) Evaluation of health education programs: this is a co-operative venture (as are the previous roles) undertaken in consultation with other senior staff. Since a program can hardly be evaluated unless it is based on clear and measurable objectives, the process of program planning and evaluation are necessarily inter-related.

McGuire (1979) indicated that there are basically only two approaches to assessing professional competence, whether initial or continuing. In one approach members of a profession are defined in terms of the "common experience" they share and the qualifications of the individuals with whom they have trained. Assessment of professional competence based on this approach consists merely in documenting that the candidate for certification or recertification has participated fully in the "proper rituals under the direction of approved priesthood." In the second approach, members of a profession are defined in terms not of shared experience but rather in terms of "shared competences." Assessment based on this approach requires that candidates demonstrate that they have completed specified tasks at a satisfactory level of performance - the rituals they endured or the priests they served are totally irrelvant.

Extensive study and debate has occured in the United States regarding competencies of health educators: Sutherland and Fasco (1982) identified and priorized competencies required of Florida Health educators by practice

settings; Shimberg (1979) described some recent trends in occupational licensing and discussed current problems in licensing and regulations; Sutherland (1977) determined the specific competencies of bachelor level community health educators practicing in Maine; Bureau of Health Education (1980) defined what the entry-level health educator should be able to do, what the prospective employer should look for in hiring a health educator, and what standards in preparation and demonstrated competence can help assure that these expectations are met; and Henderson and McIntosh (1981) identified, refined, and verified the role of an entry-level health educator working in community, medical care and school settings. The reports and recommendations from these and other studies in the United States led to the development of curriculum resource documents to guide basic academic preparation; preparation of self-assessment instruments and materials for improving current practice; and development of proficiency examination for certification or registration of health educators. The investigator hopes that the results of the Manitoba study would lead to similar outcomes.

It is against this background that the present study rests, with the hope that the results will generate an extensive effort on the part of the colleges and universities that prepare health educators in Manitoba and in Canada, as well as the community and government agencies that employ the members of this discipline, to make their programs more relevant for the current and emerging needs of health educators.

STATEMENT OF THE PROBLEM

In Manitoba, and in general across Canada, there is an increasing number of people moving into, or already employed in the field of health education or health promotion who have no formal preparation in the area. These individuals base their approaches to health education and behavior change on empirical evidence, that is, on sheer experience or observation. In addition to this lack of formal preparation in the area of health education, there have been dramatic changes in the organization and delivery of health education in the areas such as patient education, consumer advocacy, and planning. These changes have created newer opportunities for health educators to perform at more "advanced" levels of administration, supervision, consultation, policy formulations, research, and organization development.

Despite these developments, several attempts to develop programs that reflect the true needs of health educators and their administrators, that is, programs that can help these individuals keep their knowledge and skills up to date, revise them, add to them, and supplement them with new ideas, have been hampered by at least three major problems:

1. The limited knowledge of the competencies currently needed by practicing health educators and their adminstrators in Manitoba.
2. The limited knowledge of the relative importance of these competencies as perceived by health educators and their administrators.
3. The limited knowledge of the in-service training needs of health educators as perceived by health educators and their administrators.

PURPOSE OF THE STUDY

The purpose of this study was to:

1. Determine health educators' perceptions and administrators' perceptions of competencies needed by practising health educators in the province of Manitoba
2. Determine the relative importance of these needed competencies as perceived by health educators and administrators
3. Determine the degree to which perceived in-service training needs of health educators differ between health educators and their administrators
4. Determine the extent to which priorized competencies of health educators and administrators differ according to:
   (a) practice setting
   (b) number of years associated with health education
   (c) categories of competencies

RESEARCH QUESTIONS

This study focused on the following research questions:

1. What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by the health educators and administrators in charge of employing health educators? What is the relative importance of these competencies?
2. What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by health educators and administrators in charge of employing health

educators? What is the relative importance of these competencies?

3. To what extent do these priorized competencies differ between health educators and their employers, and in terms of practice setting, experience, and category of competence statement?

BASIC ASSUMPTIONS

An assumption is any important 'fact' presumed to be true but not actually verified (Gay,1981). This study was based on the following assumptions:

1. That individuals listed in the directory of senior professionals promoting the health of children and youth in Canada and other sources are health educators.
2. That persons, such as health educators and their administrators, who are actively and successfully engaged in an occupation are the most knowledgeable about competencies related to that occupation.
3. That the information obtained from these individuals is based on their past and present experiences as health educators or as administrators of health educators.
4. That the persons who filled out the instrument responded to the statements or questions honestly, and to the best of their ability, conveyed their feelings and those of their agencies about their education needs.
5. That information about competencies of health educators in the United States will, to a certain degree, apply to the Manitoba health educators.

LIMITATIONS

In any study, there are always those factors the researcher knows may affect the results or the generalizability of the results, but which the researcher probably has no control. For this study, several limitations applied:

1. All of the extensive literature on competencies of health educators was obviously not included. However, a substantial number of books, articles, and other materials were considered from a variety of sources.
2. There was not a single directory that contained a comprehensive listing of all health educators in Manitoba. Therefore, the study sample was selected from published directories, and contacts with health officials and health offices in Manitoba. The researcher recognizes that there may be numerous other individuals, associations, and agencies in the province, that are, or claim to be, health educators or administrators, but who were not listed in these sources and probably not included in the sample.
3. The number of responses received, the time allocated for this study, and the financial costs also formed the constraints on the depth of the study.

DELIMITATIONS

The study was delimited to:

1. Health educators and their administrators in Manitoba.
2. The variables which were selected to determine the education needs

of these individuals.

3. Data gathered through one instrument, a mail questionnaire, supplemented with informal discussions and literature searches.
4. Information provided by health educators and their adminstrators in the province of Manitoba, and further delimited itself to the identification and prioritization of these competencies.

DEFINITION OF TERMS

The following definitions were employed for the purpose of this study:

Administrator. An individual employed in the health education/health promotion area and who is charged with the responsibilty of hiring and/or supervising health educators.

Competence. The ability to perform a skill or a set of skills at a level or levels determined to be necessary for basic job proficiency.

Continuing education. The planned non-credit educational activities including conferences, workshops, seminars, and short courses under the sponsorship of a college, university, professional association or any combination of the above, engaged in by individuals which are primarily designed to keep them abreast of their own particular fields.

Educational need. The specific knowledge, skills, or attitudes that are lacking but are necessary for some desirable condition. The deficiency can be rectified through a learning experience (Smith,et al 1982).

Entry-level health educators. Those people working in the field of

health education who have five or fewer years of work experience

Health. Encompassed the notion of individual and collective well-being with physical, social, and psychological dimensions.

Health education. The process of assisting individuals, acting separately and collectively, to make informed decisions about matters affecting their personal health and that of others.

Health educator. An individual employed in the health area and who spends at least fifty percent of his or her time in either planning, implementing, or evaluating health education programs or any other health education related activities.

In-service training. Any type of training provided for a person currently employed in the field and which is not necessarily intended for a degree certificate.

Program. A set of planned activities designed to achieve specified objective in a given period of time.

Practice settings. The variety of organizational entities in which health educators are found working.

Skill. Any job related behavior necessary to perform activities.

CHAPTER TWO

REVIEW OF THE LITERATURE

INTRODUCTION

Much of the available literature on competencies of health educators comes from the United States. These materials, however, are highly relevant to Canadian health education systems which have evolved, in many respects, along American lines. Canadian departments of health and their administrative structures, in the opinion of many writers, have all developed, historically, in a pattern which closely resembles that of the United States. This investigation addressed the specific problems of identifying and priorizing the needed competencies of health educators in Manitoba. It also attempted to comparatively analyze these education needs according to the experiences and work settings of both health educators and administrators of health agencies. An examination of available sources uncovered no study in Manitoba directly related to this investigation, and only a small number of studies has been done in this area nation wide.

The purpose of this chapter is to set the current investigation into perspective, that is, to highlight the relevant literature on how various researchers have approached problems similar to the ones in the present study. To achieve this objective, the review in this chapter is organized into three sections. Section one summarizes the available related studies on identification and priorization of competencies, and their relationship to the present investigation; section two reviews the concept of needs

assessment, its definitions and its uses for professional development; and section three discusses continuing education in the health profession as it relates to professional development.

The literature used in this study were selected from an array of materials available, according to the following criteria:

1. Relevancy to the problem under investigation;
2. Comprehensiveness;
3. Currency, that is, dates of publication; and
4. Uniqueness.

HIGHLIGHTS OF THE RELATED STUDIES

As stated earlier, the purpose of this section is to review how previous researchers have attempted to assess the education needs of health educators. To do this, several related studies were identified (most of them were based in the United States and only a few based in Canada). A brief summary, in chronological order, of these studies follows:

Macrina, Creswell, Forouzesh, and Stone (1986) reported a survey conducted utilizing a mail survey to a ten-percent computer generated random sample of the membership for the Association for Advancement of Health Education (AAHE). The survey was designed to identify significant reasons which health education personnel have for participating in continuing professional education, and to identify topical areas of both immediate and long range concern. Over fifty percent of the respondents indicated that they regularly participated in continuing education activities and usually travelled "greater than forty miles to attend education

offerings". These investigators concluded that the growth of continuing professional education programming both encourages and indeed necessitates the identification of health educators' needs and the extent to which these needs are being met. They further made the point that both program planners of continuing professional education and those who would participate in such programs should be aware of the nature of their needs and their expectations of such programs.

Beazley (1984b) reported a survey of two hundred and nineteen Canadian health educators. The results showed that the educational backgrounds of health educators in Canada varied widely, as did their practice settings. Several recommendations that emanated from this study were: to enumerate more fully the population of health educators in Canada; to conduct specific studies on the role of beginning health educators; to conduct studies on the role of advance level practitoners; to seek consensus among health educators concerning their mission; to prescribe a basic educational preparation for entry to the practice of health education; and finally, to establish one professional association as the collective voice for all health educators.

Chen and Kaplan (1983) reported a study protocol developed by investigators from the Ohio State University to address the deficiency of information on community health educators. They surveyed, through a questionnaire, 341 organizations in Ohio that currently employed or would be likely to employ community health educators. These surveyed organizations included local health departments, voluntary health agencies, hospitals or clinics, health maintenace organizations, state agencies with

health or health-related functions, and miscellaneous agencies. Selected comparisons of responses from directors and practitioners indicated that perceptions of health education services provided were more or less the same. As a consequence of this project, the investigators recommended that the study findings be reflected in assessment of the undergraduate curricula in health education and that these findings be used in the development of baccalaureate-level community health education practitioners.

Sutherland and Fasco (1982) discussed their study designed to identify specific competencies desired of Florida's bachelor's level and master's level health educators as perceived by health educators practicing in settings of community agency, public health, schools, and higher education. They identified one hundred and thirty-five (135) competencies in the areas of administration, general health knowledge, communication and evaluation. They forwarded the instrument to six hundred and fifteen health educators. Two hundred and two individuals (33%) responded. These researchers concluded that a need exists for health education professional preparation programs to fully examine requirements in order to determine if a "reality-oriented" health educator is the end product.

Henderson and McIntosh (1981) reported a project that identified, refined, and nationally verified the role of an entry-level health educator working in community, medical care and school settings. They employed both a checklist instrument and structured interviews to refine and verify the role specification of community, medical care and school health educators. The project concluded that the role of the health educator was common to

school, community, and medical care settings, although frequency of performance and importance of the activities across the settings varied; and that there were major differences between those with bachelors and those with masters degrees in practice characteristics.

Rubin, Price, Roberts, and Kegley (1981) reported a study designed to conduct a preliminary investigation of health education planning, especially school health education planning, in Health Systems Agency (HSA). The entire population of two hundred and five (205) HSAs was surveyed by mail with the questionnaire developed to seek information about planning of school health programs, participation of professional health educators in the planning process, and the definition of health education used by the HSA. The mail survey resulted in a 78% response rate. The data revealed that 95% of respondents were involved in health education planning.

Shannon and Mitic (1980) reported a survey designed to determine the current status of the Canadian community health educator. They mailed out Eighty-eight (88) questionnaires to health-related governmental and non-governmental agencies, associations, societies and industries across the country. Most respondents to the questionnaire (44 of 45) agreed that there was a need to prepare community health educators formally. They concluded that the level of education needed to provide services would be easier to determine if there were a consistent definition of the job performed.

Norton (1980) reported a study to develop professional materials for the preparation of local administrators of vocational education. He employed a questionnaire of 191 task statements that described all known functions

and responsibilities of secondary and post-secondary vocational administrators. Ninety-two percent (92%) of these administrators responded to the questionnaire and indicated that 166 of the 191 statements were competencies important (ie median score of 3.0 or higher) to the job of vocational administrator. He concluded that the job of local administrators of vocational education can be adequately described in terms of competence or task statements.

Matthews and Schumacher (1979) discussed a study which assessed the conceptions, needs, and participation factors concerning professional continuing education in nursing on the part of registered nurses in two different hospital settings. An eight-item questionnaire encompassing seven closed-ended response sets and one open-ended item was developed and revised three times with the assistance of two in-service education directors. Ninety-seven questionnaires were distributed to registered nurses, and eighty-nine questionnaires were completed and returned (92% response rate). Eighty-eight percent of the respondents believed that continuing education activities were necessary to maintain professional competence.

Broski and Upp (1979) reported a study designed to determine what allied health professionals want from continuing education programs both in content and in format. Thirty-eight different occupations were represented in the inventory. A total population of 29,534 individuals was identified and the entire population was surveyed to determine their continuing education preferences. A mail survey was selected as the most efficient means of conducting the study, given the size of the population. Among the consensus

reached in this study was that, to the extent possible, those charged with sponsoring continuing education programs should consider delivery formats and preferred program characteristics (length of program, day of the week, distance, and cost) in addition to content when planning continuing education programs. They concluded that continuing education programs did play a prominent role in assuring the competence of allied health professionals, and recommended that providers of these programs met the needs of their audience with content that is timely and perceived as useful.

Connelly (1979) discussed a study of continuing education activities in those institutions who were members of the American Society of Allied Health Professions (ASAHP). The study data were obtained by using a mailed questionnaire format containing thirty-four questions with subquestions in a forced choice and opinion format. Sixty-one usable questionnaires were returned for a 41.5% return rate. There was evidence from this study that continuing education activities existed in allied health units regardless of whether or not specific centralized administrative structure for continuing education existed.

Governali and Creswell (1977) reported a study to forecast health education manpower in the State of Illinois. They used a sample comprised of approximately 15,000 Illinois teachers to obtain an estimate of the percentage of inactive health educators among the Illinois teaching population. The methodology involved a stratified single-stage cluster sampling design and involved two rounds of surveying. The findings of this study indicated that much more must be learned and accurately recorded about the professional course taken by health educators. For example, little

seemed to be known about the employment patterns of health educators once they graduated from professional preparation institutions, data related to their movement in and out of the profession are sparse.

Norton (1977) reported a study designed to identify and nationally verify the competencies considered important to local administrators of vocational education. He employed the DACUM (Developing A Curriculum) approach to update the competencies identified through the literature search and to generate several additional competencies. This instrument was mailed to one hundred and thirty practicing administrators of secondary and post-secondary vocational education programs, and were asked to respond to each task statement on a six-point likert type scale. The results showed that one hundred and sixty-six (166) of the one hundred and ninety one task (191) statements were considered important (meaning a medium score of 3.0 or higher). Fifteen task statements differed significantly between the way urban and rural administrators responded.

Sutherland (1977) discussed a study designed to identify the specific importance of selected competencies expected of bachelor level community health educators, and to measure the perceptions of these health educators by work settings of community/public health agency, the medical care setting, schools, and higher education in Maine. She identified ninety-nine competencies and examined them through a survey of sixty-seven (67) practicing health educator in Maine who were members of public health educator association. Results showed that process skills ranked higher in importance than cognitive health content. Dealing with community groups was rated as the most important. Behavioral concepts were rated higher in

importance than liberal studies areas. She concluded that work settings were a factor in determining the importance of required skills and role functions. This study was designed to measure the perceptions of bachelor's level health educator competencies in Maine.

Quinlan (1976) reported a survey of professional bodies in Canada which showed that their methods of protection from the less obvious danger of incompetence were not so well developed. Twenty percent of the associations who responded to the survey stated they relied on complaints from the public to reveal a member's incompetence; sixteen percent had a system of peer review in which the professional was evaluated by his or her colleagues; and nine percent used their professional association's code of ethics to prod the conscience of the member to remain competent. A further twenty percent stated that professional development was used to maintain competence. Thirty one percent of those surveyed indicated they lacked any mechanism in this regard. This study concluded that many professional bodies in Canada recognize their responsibility to the public but at the same time acknowledge the inadequacies of present methods to ensure competence.

Summary of the related studies

A perusal of the above studies permits one to reach several conclusions:

1. That various methodologies have been used to determine the important competencies for health education activities, for example, mail survey, checklists, structured interviews, DACUM approach, to name a few.

However, most researchers have used either a structured interview or a questionnaire and some type of likert scale to obtain and organize respondents' perceptions.

2. That there was little uniformity in the names given to these "competencies". Some studies referred to them as duties or functions, others as understanding and ability statements, and yet others as task statements. Regardless of what these competence statements were referred to, they represented the acceptable level of skill or proficiency required to carry out an activity.

3. That response rate ranged from thirty-three percent (Sutherland and Fasco, 1982) to ninety-two percent (Norton, 1980; and Matthews and Shumacher, 1979), with an average response rate of 72%. This high response rate supported Dillman's (1978) argument that for the mail survey to serve the needs of the investigator, it must be demonstrated that adequate response can be achieved to the questionnaires that contained the type of questions required for the research. Furthermore, results from the above studies suggest that high response rates are not unusual for mail questionnaires.

In summing up this section, the relationship between these studies and the present investigation must be stated.

1. The range of individuals and organizations surveyed in these studies has some resemblance to the individuals and agencies involved in health education in Manitoba: health departments; voluntary agencies; foundations; and private agencies (Chen, 1983; Sutherland, 1977; Sutherland and Fasco, 1982; and Shannon and Mitic, 1980).

2. The variables considered in the above studies also have some similarities with the variables being considered in the present investigation: determination of (perceptions) education needs of health educators (Sutherland, 1977; Sutherland and Fasco, 1982); listing of major and specific responsibilities appropriate to serve as the basis for education of entry-level health educators (Henderson et al, 1981); determination of the participation factors concerning in-service training programs (Mattthews and Schumacher, 1979); and the assessment of the value of continuing programs for health professionals (Broski and Upp, 1979).

3. Several of these studies measured the health educators' perceptions in terms of practice settings, for example, community health education, and school health education (Beazley, 1984a; and Sutherland, 1977), and in terms of levels of experience, for example, entry-level and advanced levels (Beazley, 1984a), and in terms of levels of education, that is, Bachelors, Masters, Doctorate and others.

4. These studies supported, and indeed, suggested the procedures employed in the present investigation, that is, the use of mail surveys in investigating education needs. These studies also re-emphasized the importance of a needs assessment as a first step in the methods of ensuring professional competence.

NEEDS AND NEEDS ASSESSMENT

A common assumption is that a formal needs assessment is necessary for the development of a successful continuing education program for health educators in Manitoba, or any other educators for that matter. Rationale

given for this includes the belief that one cannot know the learning interests and needs of the people without a systematically planned formal design for detecting them. With knowledge increasing as fast as it is, continuing education, will soon become accepted as an essential component of the life and career of every health education professional.

The purpose of this sub-section is to clarify the meaning of education needs and needs assessment and to show why it is important that an education needs assessment preceed professional development programs.

Many researchers have distinguished between needs identification and needs assessment stating that the former describes health and social service requirements in an area, while the later estimates the relative importance of these needs. Within health service areas, needs assessment strategies are designed to provide data that will enable planners to determine the extent and kinds of needs there are in a community; to evaluate existing service resources; and to provide information for planning new service programs in the light of the community's needs. In addition, Knowles (1970) stated that the more concretely the learner's level of aspiration can be identified in relation to the present level of competencies, the more exactly can the educational need be defined.

There are several definitions of "need" and "needs assessment". Need has been defined (Sarthory, 1977) as "the gap between what is viewed as a necessary level or condition ..... and what actually exists (p.25)". Morgan and Feldman (1977) defined an educational need as "the measurable discrepancies (or gaps) between perceived current outcome (p.36)". Witkin (1976) defined need as "the discrepancy between what is and what should

be, or between present conditions and desired conditions (p.1)". Keller (1981) defined need as "the descrepancy between what is and what ought be, the gap between what in reality is occuring and what ought be the case (p.1)." Knox (1973) defined educational need as:

> A gap between a present, or initial, or existing set of circumstances and some changed circumstances. These circumstances can be specified in terms of knowledge, performance, and attitudes, each of which is a component of competence. The changed set of circumstances may be described in terms of how the individual and/or someone else who have the individuals knowledge, performance, and attitudes, differ from the initial set of circumstances. For any individual, these gaps are in a constant state of flux; shifting in number, magnitude, and importance throughout his/her professional career (p.1).

English (1977) indicated that needs assessment has come to be defined and utilized as a "vehicle" to establish and clarify institutional goals with explicit expectation that those goals will change the existing priorities. Rebore (1982) stated that the process of assessing employee needs is essentially the process of determining the discrepancy between the existing and the needed competencies of the staff. He continues to indicate that the professional development program is concerned with both the abilities of individuals currently occupying a position and the abilities an individual will need to qualify for promotion to a position of more responsibility.

Kelley (1978) defined professional development, a desirable outcome

of needs assessment, as all the experiences that are provided by the institution or recognized by it as being important for, and contributing to, the personal and professional growth of employees. Simply stated, professional development includes all those activities sponsored or organized by the agency to help employees do their work better with greater satisfaction.

There are several other uses of needs assessment. Melton (1977) argued that educators have utilized the concept of needs assessment as the first step in the process of change to establish the necessary foundations for planning and to base decisions on documented evidence. Dick and Carey (1977) indicated that the application of needs assessment techniques by decision makers who must gather pertinent information and make choices based on this information is rapidly increasing. Both Kaufman (1977) and Witkin (1977) showed that needs assessment, as an activity designed to establish goals and set priorities for educational planners, has been a part of the planning process for public education in the United States for the past decade. They concluded that a needs assessment is best used as the basis for useful planned change, that is, it is a necessary first step in planning.

Sarthory (1977) indicated what he calls the "promise" of needs assessment. According to him, most educational administrators know the promise needs assessment holds: they appreciate its capacity to effect institutional accountability in the finest sense of the term; they sense its ability to improve organizational direction-finding by helping adminstrators differentiate between desired and current organizational achievement; they

recognize its ability to assess the validity of means being used to attain organizational purposes; and they agree with its ability to set forth indicators to redesign educational means by sensing appropriate timing for changing organizational goals. Gale (1977) explained that needs assessment methodolgy can be used to:

1. Assess competencies required for functioning in a particular position,
2. Provide data for planning in-service and pre-service education programs.
3. Assess job performance.
4. Provide information for personnel planners.

The National Education Association's study (1975) , concerned with teacher education in-service, lists the follwing uses as valid reasons for the employment of the needs assessment technique: goal and priority setting; data gathering; evaluating existing in-service programs; and establishing effective staff development programs. An additional purpose of needs assessment can be to help employees look at their present level of performance in regard to a given situation, such a self-evaluation can aid in the determination of where to invest limited resources to achieve a desired performance level. Morgan and Feldman (1977) stated that a needs assessment, in its most complicated form, is an educational "market analysis", but in its simplest form, it is a matter of asking people rather basic questions regarding their perceptions of how well an institution or organization is providing educational services.

If used correctly, and mindfully, a needs assessment can lead to more successful, practical, and rewarding educational experience for both health

educators, their administrators and health education agencies. Specifically, needs assessment, if properly done, can: (1) determine a process for identifying and documenting valid measured objectives, (2) provide a realistic, empirical basis for the selection of programs and resources, (3) provide measurable criteria for evaluation of educational programs, projects, and services, and (4) lead to an effective professional development process.

Summary of needs and needs assessment

A number of points deserve attention in summing up the major benefits and concerns of a needs assessment in health education:

1. A needs assessment is never complete. It must be a continuing affair, and changes in needs can be expected. In health education, perhaps more than other areas, this point is more acute because the duties and functions of health educators are transitory, they change with only brief duration.

2. A needs assessment implies the documentation of a measurable difference between the current and the desired state of affairs. This means that a discrepancy analysis for health education goes beyond just guessing either what their needs are or what they should be, it requires hard empirical data.

3. A needs assessment is not a solution. That the education needs of health educators in Manitoba has been determined does not pre-conceive solutions to these problems. Indeed, pre-conceived solutions must be left out of statements of discrepancies, or they bias the outcome and restrict creative ways to solve a problem. It must be recognized that a needs

assessment is only a beginning (Kaufman, 1972).

4. In setting priorities of need, it must be considered in terms of what it costs to meet the need against what it costs to ignore it. In health education the cost of ignoring an identified education need may by far outweigh what it costs to meet the need.

5. Instrument selected for a needs assessment must not apportion blame on any group. The more neutral the instrument is, the more the respondents (partners of educational endeavor) are willing to respond to it. Unless the health educators willingly and voluntarily respond to the needs assessment instrument, their education needs cannot be detected.

CONTINUING EDUCATION IN THE HEALTH PROFESSION

Continuing education as employed in this study was defined as the planned non-credit educational activities such as conferences, workshops, seminars, and short courses under the sponsorship of a college, University, professional associations, or any combination of the three.

The main purpose of continuing education is for professional development. Keller (1981) stated that professional development programs should provide each member an opportunity to:

1. Expand and reinforce academic working knowledge and skills.
2. Pursue specific areas of interest.
3. Share unique professional skills with other health educators.
4. Communicate concerns with fellow professionals.

Knowles (1970) agreed with him when he asserted that "the primary and immediate mission of every adult educator is to help individuals satisfy

their needs and achieve their goals (p. 23)". Knowles also stressed that the identification of individuals' needs and goals is critical to the operation of successful educational activities. And that individuals who have the responsibility for developing continuing education programs should not tell adult participants what they need to know, rather they should help adults reach solutions to their identified educational needs. As Knowles (1970) put it:

> Infact, perhaps the highest expression of the art of the adult educator is skill in helping adults discover and become interested in their needs. But in order for him to have a chance to practice this art, he has to first reach them through their intersts (p. 79-80).

Since participation in continuing education is essentially a voluntary process, continuing education programs which are shaped by the needs or interests of those for whom they are directed have a greater potential of achieving the desired outcomes.

Keller (1981) stated that when adults discover they are capable of identifying the direction their learning should take, their motivation increases and there is developed a strong desire to continue the learning process.

Macrina et al (1986) indicated that continuing professional education has attracted a great deal of attention within the profession of health education. Reasons for this are varied and linked with the identification of education needs.

Crase (1981) showed that there is a need to gather extensive baseline data on the characteristics and work experiences of college and university health educators. He cited several other studies that have provided baseline data that are useful for comparative purposes. He declares:

> the availability of a large amount of current baseline data depicting characteristics and work experiences of health education faculty would be useful in charting future directions of health education. At present, there is paucity of such information (P.393).

Knowles (1970) advocated the gathering of baseline data regarding clients' needs to ensure that learning experiences meet the needs of the clients. Keller (1981) in discussing continuing education programs being conducted for older adult service providers quoted Buffer (1978) as stating:

> Efforts at staff development and short-term training are frequent but somewhat repetitive. One participant said he was "bored as hell" hearing the same principles over and over again. Several others expressed the desire to have some input for the development of plans for training educational offerings. It became apparent that prospective trainees would like to be consulted when educational and training needs are being determined (p.3).

Campbell and Glazer (1984) referred to a study that found a significant difference between the performance of certification exaninees and the performance of the recertification examinees, with the later doing

less well in all sections than the former. Physicians Assisstants (PA) Certification Examination was administered to 1,166 PA who were originally certified five or six years earlier. The results of this study showed that administering a current entry-level examination as a certificate examination does provide a means of peer comparison.They concluded that there is a decline in performance as the years after receipt of degree increase due to the new knowledge that may have developed during the intervals.

Smith, Smith, and Ross (1982) stated that the health profession can no longer afford to stand back and plan continuing education without documenting the need for such offering. They made the point that emphasis on conservation of time, money, and human resources provided the rationale for including the identification and priorization of competencies in curriculum planning.

Sutherland (1981) indicated that in order to determine health needs and priorities for a region, a health planner must first collect and analyze data on the population's health status and current health services provided. Considered in the process of data collection should be the type of data, the uses of data, and the sources of data. A data collection can thus identify conditions and resources such as facilities and manpower for recommendations to the proper health authority.

A study on the generic role verification of entry-level health educators in Canada was conducted by Dr. Richard Beazley (Beazley,1984a). He concluded that health education provides a stable occupation for its practitioners, usually in combination with related administrative, general

teaching, or patient care responsibilities; and that , there is a generic role for all entry-level health educators in Canada, regardless of work setting. This generic role, according to him, includes assessing the need for health education, planning health education programs, coordinating planned health education programs, and continuing to develop professionally.

The Ontario Ministry of Health Education (1986) recently completed a project which provided guidelines for the health educator position. Based upon health education experience in Canada and the United States, this document addressed those areas in which the health educator can make a contribution to the health education programming. This document also offered insight into the range of skills and training which would be required to enable the health educator to assist the Health agencies to effectively achieve their health education goals. Finally, the document defined the range of responsibilities a health educator could be expected to assume: needs assessment for health education; program planning for health education; implementation/communication of health education; resource development and coordination; and evaluation of health education programs. It concluded by outlining the functions, skills, and knowledge for each area of responsibility. It is hoped that this present study can provide similar baseline data for Manitoba as the project did for Ontario.

Spearman and Ryant (1976) indicated that during the early 1970s, most Canadian provinces were developing and implementing new policies for health education delivery. These policies were concerned with such issues as fragmentation of health services and utilization of health manpower among others. In Manitoba, the new directions were articulated in the White

Paper on health policy published in 1972. Spearman and Ryant , in an evaluation of the Manitoba Health Education project, argued that there is an inherent dilemma in the staff expectations for the position of the health educator in Manitoba, because each member of the health team perceived health education activities relative to himself or herself.

To conclude this chapter, several observations can be made from the foregoing discussions:

1. There is reasonable agreement in the literature concerning the use of mail questionnaire techniques in the assessment of needed professional competence of health educators and their administrators. The literature indicates, however, that for the mail survey to be useful, it must be demonstrated that adequate response can be achieved. Furthermore, most of the studies cited displayed some implications for the purpose of this investigation, that is, most of them measured the perceptions of health educators and administrators in terms of their work settings, their levels of education and their levels of experience.

2. There is a reasonable consensus concerning the concepts of needs assessments and continuing education, their definitions, and their uses for professional development. This review suggests that a needs assessment should be an on-going endeavor, and should always measure the difference, "the gap", between current level and desired level of competence.

3. These sources warned that a needs assessment is not a solution: actions must be taken to develop appropriate programs that can bridge the gap uncovered by needs assessments.

4. The literature suggests that continuing education should provide the

health educators and their administrators with the opportunity to expand and reinforce their academic working knowledge and skills, the opportunity to pursue new areas of interest, and the opportunity to share professional skills and communicate concerns with fellow professionals.

CHAPTER THREE

PROCEDURES OF INVESTIGATION

INTRODUCTION

The purpose of this chapter is to describe the procedures employed in this investigation. Within the field of education, many kinds of surveys are conducted, including community surveys, pupil surveys, interview surveys, job surveys, market surveys, teacher-rating surveys and needs assessment surveys. The purpose of survey research is to obtain information that describes existing phenomena by asking individuals their perceptions, attitudes, behaviors, or values (Moore, 1983). Typically, surveys are conducted using a questionnaire or interview format which could be either mailed to subjects, or administered individually, or by phone. Moore (1983) indicates that in order to assess the more objective and intangible research components such as perceptions, attitudes, values and behaviors, a rating scale is employed to rate or rank a perception and to organize responses.

Dillman (1978) indicated that the use of a written survey has several advantages:

1. It is relatively easy to distribute, and can be filled out fairly quickly. Distribution is usually by mail, however, it is possible to distribute questionnaires on a person-to-person basis.
2. It allows for selection from specified alternatives, and therefore reduces the chances of getting useless responses. This is particularly true for the closed-ended or forced-choice type of

questionnaire used in this study.

3. It provides desirable controls, the most desirable control being that quantifiable data are obtained allowing the use of pertinent statistical analyses such as correlation and factor analysis.
4. It permits the use of large samples and therefore increases reliability.
5. It permits the use of concise questions representing a wide range of the subjects under investigation.

Perhaps the main caution in using the mail survey technique is that the survey must be carefully designed and that emphasis should be placed on the prompt return of the questionnaire and on advantages of participation for the respondent. Also, if sensitive information is to be gathered, anonymity should be assured for the most reliable results.

Past research on mail questionnaire techniques provided little information about how the response rate can be maximized. However, Dillman (1978) suggested three things that must be done to maximize survey responses:

1. Minimize the cost for responding.
2. Maximize the rewards for doing so.
3. Establish trust that rewards will be delivered.

Dillman suggested two more factors that can influence the response rate. The first is the type of population surveyed. He argued that a study that surveyed a "specialized group" such as doctors, lawyers, and engineers has a better chance of getting a higher response rate than one that surveyed the general public. The second is the length of the questionnaire. He noted

that there is almost no difference in response rate for various lenghths below 12 pages, or about 125 items. The response rate to these questionnaires averaged 76%. However, beyond that length the response rates declined to an average of 65%.

Dillman indicated that the difference between a list of questions and a questionnaire is much like the difference between individual flowers and a floral arrangement. Not only is a poorly arranged display unattractive, it distracts from the beauty of the individual flowers contained within. The professional appearance achieved by the booklet-format questionnaire, the carefully designed cover pages, and the quality printing job tell the respondents that a great deal of work went into the questionnaire.

DESIGN OF THE STUDY

The design of this study followed a descriptive survey pattern and employed a written questionnaire technique. The priorities of the specific competencies needed by health educators in the Province of Manitoba was determined through a written questionnaire survey using the experience of practicing health educators and their administrators. A mailed survey was selected as the means of conducting this investigation after perusing the literature. Smith et el (1982) indicate that "the most common technique used across all health profession to identify educational needs are surveys and literature searches (p.53)".

To answer the following research questions: (1) What are the needed competencies of health educators in Manitoba as perceived by the health educators? (2) What are the needed competencies of health educators in

Manitoba as perceived by administrators in charge of employing health educators? (3) What is the relative importance of these competencies as perceived by health educators? (4) What is the relative importance of these competencies as perceived by administrators? (5) To what extent do these priorized competencies differ between health educators and their employers, and in terms of practice setting, experience, and category of competence statement?, the design of this investigation employed a slight modification of the methods and procedures employed by Norton (1977) as follows:

1. A comprehensive literature search was conducted to identify the relevant health educator competency studies.
2. The available research on the identification and prioritization of health educator competencies was analysed to select the competence statements that appeared to be relevant to both health educators and their administrators in Manitoba. These competencies were sorted into five main categories: communicating health and health education needs; determining the appropriate focus for health education; planning health education programs in response to identified needs; implementing planned health education programs; and evaluating health education.
3. The selected competence statements were merged into a single list. The major categories were not indicated in the mailed out questionnaire in order not to bias the respondents (respondents in certain work settings may deliberately rank certain statements higher if they knew what categories those statements fell into).

4. These competencies were then priorized through a written survey using the experiences of all known health educators and administrators of health educators in Manitoba. A Likert-type scale was employed in the rating.
5. The findings of this survey were summarized and analysed, that is, a comparative analysis between health educators and their administrators was prepared in terms of experience, category of statement and practice settings.
6. Recommendations based on these findings were made to faculties and agencies charged with the preparation and hiring of health educators in the province.

Population of the study

Population refers to an entire group of individuals or subjects having some common observable characteristics (Moore,1983), and to which the results of the study are generalizable. The population of health educators in Canada is elusive and unenumerated (Beazley, 1984). The Manitoba province is not different.

The population of this study included all health educators and their administrators in Manitoba, (Health educator is an individual who is employed in the health education/health promotion areas and who engages in health-related activities either administrative or direct service delivery for at least 50% of their time).

The sampling techniques

A sample is a subset of a population. In Manitoba, there was not one department or organization that could supply an accurate listing of the health educator population. Therefore, to ascertain the sample for this study, a sample frame was developed from a review of several directories, for example, the list of health educators as published in the directory of senior professionals promoting the health education of children and youth in Canada (Health and welfare Canada,1984); the address lists in selected fields of services (Who's Where in Manitoba, 1985); and by contacts with several individuals, health agencies and health centres in Manitoba that engage in health education related activities. This technique was used for the following reasons: First, there was a variety of health education agencies and personnel represented by these sources, therefore, this frame provided a wealth of experience, and hence, a broad knowledge from which to respond to the questionnaire. Second, these resources were available in Winnipeg making it more accessible to the investigator.

The Sample

A total of about 100 names were identified from these sources for the province. A further scrutinization of these names produced 51 known health educators and health administrators that constituted the sample.

DEVELOPMENT OF THE INSTRUMENT

The items selected for this instrument were primarily obtained from, and categorized according to: the report of the Bureau of Health Education (1980); and the guidelines developed by the Ad Hoc Task force of the Society for Public Health Education (SOPHE) in San Francisco for the preparation and practice of professional health educators (SOPHE,1977; Galli, 1978).

Additional items were developed from an examination of several research studies including the work of Sutherland (1977) on the specific competencies of health educators as perceived by Maine practicing health educators and as perceived by the Florida health educators (Sutherland and Fasco,1982); the work of Chen and Kaplan (1983) on the professional preparation needs of community health educators; the report of Clint E. Bruess (1976) on the professional preparation of health educators; and the Doctoral dissertation of G. Pankiewcz (1983) on the needs assessment of vocational education teachers in Manitoba.

The literature suggests that the needs assessment process has many limitations associated with it. However, several steps were taken in this investigation to minimize these limitations and to construct a valid instrument:

1. The investigator recognized that competence statements are often so general that placing them in priority order through assessment procedures are difficult. To alleviate this problem, the investigator attempted to develop clear and operationalized competence statements from various sources. The researcher utilized the extensive resources of competence

statements that have been validated and used in numerous studies (SOPHE, 1977; Galli, 1978; Henderson et al, 1981; Sutherland, 1977; Sutherland and Fasco 1982; and Bureau of Health Education, 1980).

2. This study attempted to priorize education needs using measures of a central tendency, that is, the mean. The problem with this approach is that it usually brings popular needs to the top of a priority listing leaving less popular, but perhaps equally important needs towards the bottom. To minimize this problem, the investigator collected both general and specific information about the need, that is, information about the category of statement (general) and the relative priority of the statement (specific).

3. The five point likert-type scales employed in this study, together with the use of measures of central tendency, tend to cluster the needs into a narrow range. In order to minimize this problem, the investigator considerably reduced the complexity of the instrument by using only one type of scale for both health educators and their administrators and for priorizing the importance of the competence statements for both health education activities and in-service training needs. This approach also made the instrument easier and quicker to complete, simplified data analysis and comparisons between and among priority rankings and simplified reporting of results.

4. This assessment relied on health educators' and administrators' perceptions about the current status of their education needs. The investigator recognized, however, that this sometimes only reflects the perceived (not actual) situation since individuals may lack accurate and complete knowledge about the status of many areas that they are being

asked to pass judgement on. To minimize this limitation, the respondents were selected, in a manner that ensured the inclusion of individuals from several areas and at several levels of professional performance.

The instrument

The instrument was divided into two parts. Part one was further divided into five categories (Bureau of Health Education, 1980). It was felt that grouping the competence statements into broad categories would be helpful in analyzing the responses, making comparisons and drawing conclusions. Part two requested mainly general demographic data, that is, information descriptive of selected personal and professional characteristics such as earned degrees, field of specialization, present position, years in service, and other aspects of formal preparation and practice including participation in professional Associations and professional development programs. The following are the five main categories of part one:

The first category in the instrument is communicating health and health education needs, concerns, and resources. In this category, health educators and their administrators were asked to priorize competencies relating to: the provision of information regarding health and health education; interpretation of health information; facilitation of communication; and dissemination of information about health education programs.

The second category is the determination of the proper focus of

health education. This category required the health educators and their administrators to priorize a variety of competence statements relating to: the collection of information about population of interest; and the analysis of information to determine areas of need.

The third category is planning health education programs in response to identified needs. In this category, health educators and administrators of health educators assigned priority to those competence statements that enable them to: participate in the educational planning process; participate in the selection of program objectives based upon information acquired as part of the planning process; and design educational programs consistent with specified educational objectives.

The fourth category involves the implementation of planned health education programs. This category includes priorizing competence statements that relate to: assisting in mobilizing personnel needs to carry out the plan; securing operational resources necessary to carry out health education programs; and carrying out educational programs for sharing information, influencing behavior, and resolving problems.

The fifth category is the evaluation of health education programs. This category contained competence statements that involved: participation in developing a design to assess achievement of educational objectives; assemblage of resources required to carry out evaluation; implementation of the evaluation design; and communication of the results of evaluation.

Validation of the instrument

The purpose of the validation process was to obtain some professional appraisal of the validity of the questionnaire for the perceptions the instrument attempts to measure. To achieve this purpose, the concept of content validity was employed. Content validity is the "representativeness" of the content of a measuring instrument, that is, the degree to which an instrument represents the area of the content it is designed to measure (Kerlinger, 1964).

While content validity is hard to measure quantitatively, because no numerical coefficients are usually obtained, it can be very valuable in certain research situations. Moore (1983) indicates that content validity is most useful with ability, achievement, and skill and proficiency surveys. Perhaps the only limitation associated with this process is that it is basically judgemental, that is, it consists of logical thought and judgement as the means of deriving valid test or survey items (Barlian, 1982). In using content validity, a formal panel of judges logically evaluate and rate the instrument items independently, so that items may be added, modified, or deleted relative to the panel's majority opinion (Barlian, 1982). Therefore, each item is judged for its presumed relevance to the property being measured (Kerlinger, 1964).

For this investigation, the opinions of the members of the research committee were solicited as to the suitability of the items. In addition, and to facilitate the identification of additional competencies, particularly those that might reflect recent trends and changing health educator responsibilities, a panel of seven health education graduate students who

have varied experiences in the field of health education (Nurses, dieticians, and health promoters) was asked to validate the instrument. This jury of "experts" consisted of individuals who met the following criteria:

1. At least five years of involvement in the health education field.
2. Knowledge in the area of duties and functions performed by health educators and their administrators and skills needed for those functions.
3. A professional background in education.

The jury members were sent a prototype copy of the questionnaire with 51 items in part one and 15 questions in part two and were asked to review the instrument for recommendations, modifications, deletions, and additions utilizing the following criteria:

1. Clarity of the statement.
2. Consistency of statement with the purpose of the study.
3. Ease of response, that is, uniform interpretation of statement by respondents.
4. Required time for completion of questionnaires.
5 Additional suggestions to clarify items and reduce errors of interpretation.

This process resulted in a questionnaire which has 29 items in part one and 14 questions and sub-questions in part two. The time required to complete the questionnaire was found to be 20 minutes.

DATA COLLECTION

The questionnaire instrument, along with a covering letter (see Appendix G) describing the purpose of the study, and soliciting participation of the respondents were mailed to the identified practicing health educators and administrators in the Province of Manitoba. These participants were asked to rate the importance of each of the identified competence statements on a five-point Likert type scale in two ways:

1. Its importance in the performance of health education activities.
2. Its importance to him or her personally as a need for further professional development through in-service training.

They were further instructed that a score of:

"1" would indicate no importance

"2" would indicate low importance

"3" would indicate average importance

"4" would indicate above average importance

"5" would indicate highest or greatest importance

It was stressed to the respondents that although they may feel that all items were important, it was necessary to distinguish between higher and lower importance of competence. There was one follow-up mailing and several telephone calls to non-respondents.

DATA TREATMENT

The 29 competence statements from part one of the instrument were analyzed descriptively as follows:

1. An average response for all the respondents was calculated and recorded for each item for its importance in the performance of health education activities. These scores were ranked as to their level of priority. A rank-ordered list of competence statements indicating the relative priorities as perceived by the health educators and their administrators was developed.

2. This calculation was repeated for each item for its importance for in-service training needed by health educators and their administrators. A second rank-ordered list of competence statements indicating the relative priorities of the items for in-service training needs as perceived by both health educators and their administrators was developed. These two operations were particularly useful in establishing the overall priorities of the needs.

3. The 29 competence statements were grouped into categories and the analysis was repeated for all respondents and for all categories and also for their relative importance for both the performance of health education and for in-service training. This computation was necessary to develop a comparative analysis of the ranked priorities between the perceptions of health educators and administrators in terms of the categories of the competence statements.

4. The 29 items were analyzed to develop a comparative analysis of the ranked priorities of all the items for their relative importance for both

in-service training needs and the performance of health education in terms of the experience of health educators and administrators, and their practice settings.

As pointed out earlier, the second part of the questionnaire collected mainly demographic data. This information was analyzed by developing a profile of all respondents for the 13 attributes on the instrument, for example, levels of education, experience with health education, title of current position and so on. The number and percent of response to each of these attributes were calculated and recorded in several tables.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The purpose of this chapter is to present the major findings of the assessment of the perceived education needs of health educators in Manitoba. The research questions addressed in this study are:

1. What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by the health educators and administrators?. What is the relative importance of these competencies?
2. What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by the health educators and administrators? What is the relative importance of these competencies?.
3. To what extent do the priorized competencies differ between health educators and their administrators and in terms of practice setting, experience, and category of competence statement?

In order to respond to the these research questions, the results of this study are presented and discussed in the following manner:

1. A profile of the respondents is developed describing such characteristics as work settings, levels of education, major fields of specialization, affiliation with professional organizations, necessity of in-service training in their work, willingness to participate in in-service training, and years of experience.
2. The rank-orders of the importance of the competence statements for

the performance of health education activities as perceived by both health educators and administrators are presented and discussed.

3. The rank-orders of the importance of the competence statements for in-service training needs as perceived by both health educators and administrators are presented and discussed.

4. The comparisons of ratings between health educators and administrators in terms of their work settings are presented and discussed.

5. The comparisons of ratings between health educators and administrators in terms of their levels of experience, are presented and discussed.

6. The comparisons of ratings of categories between health educators and administrators for both the performance of health education activities and the need for in-service training are presented and discussed with their mean scores.

The Profile of respondents

The total possible return for this investigation was 51, 38 usable questionnaires were returned. This constitutes a response rate of 75%. Of the usable responses, the split between health educators, and administrators, was uneven. Twenty-seven (71%) were classified as health educators while eleven (29%) were classified as administrators.

Levels of experience

In terms of the respondents' experience on their current positions and with health education, seven respondents (18.4%) have less than one year experience on their current positions, 12 respondents (31.6%) have 1-3 years experience, while eight (21.2%) have 7 or more years of experience on their current job. As to the experience with the field of health education, the distribution was a little different. Nineteen respondents (50%) have 1-10 years of experience with health education, while 19 (50%) have 11 or more years of experience with the field. This distribution indicates that the levels of experience of health educators and administrators in Manitoba vary extensively.

Levels of education

In terms of levels of education, 33 of the respondents (86.7%) have a Bachelor's degree or higher while five respondents (13.3%) have certificates and diplomas other than University degrees. A more detailed distribution is presented in Appendix A. This distribution is consistent with what other researchers have found. Beazley (1984) found that nearly every health educator (Canada wide) had earned a bachelor's degree, that about one-quarter of those he surveyed were master's degree recipients, and that about eight had doctoral degrees. He concluded that a baccalaureate degree seemed to be the entry-requirement for health education practice. This distribution seemed to suggest that in-service training programs aimed at health educators and administrators in Manitoba should consider their education levels.

Major fields of specialization

The respondents were asked about their major fields of specialization in school. The following distributions were indicated: School health education had one respondent (2.6%); twelve respondents (31.6%) indicated Community/Public health education, while eight respondents (21.1%) indicated Patient/Health care education or training as their major field of specialization. Combined school and community health education was indicated by ten respondents (26.2%) as their major field. Four respondents (10.6%) indicated health, physical education, and recreation as their area of specialization. Other areas such as social policy, administration, home economics and education, nutrition education, educational psychology, and dietetics were indicated by three respondents. This distribution confirms what Shannon and Mitic (1980) found that academic backgrounds of those persons designated as health educators varied considerably, and that many professionals call themselves health educators regardless of their training.

Description of present work

In terms of the description of the present work of the respondents, seven respondents (18.4%) described their work as primarily administrative; 12 respondents (31.6%) perceived their work as direct health education/service delivery; 19 respondents (50%) perceived their work as both administrative and direct service delivery; no respondent perceived his or her work as primarily research. Rubin et al (1981) revealed that 95% of their respondents were involved in health education planning and administration.

Affiliation with professional organizations

Thirty-one of the 38 respondents (81.6%) belong to one or more professional organizations. However, only 17 respondents (44.7%) have membership in a health education association such as Canadian Health Education Society. The respondents were further queried about the relative worth of a professional organization in managing their day-to-day operations. Twenty-two respondents (57.8%) felt that the relative worth of a professional organization is either low or unimportant while 16 respondents (42.2%) felt that the worth of professional organization is either moderate or very high.

Subscription to professional journals

The respondents were asked if they subscribed to any professional journals to keep up-to-date with the changes in their areas. Six respondents (15.7%) did not subscribe to any journals. Eight respondents (21.1%) subscribed to one or two journals while 24 (63.2%) subscribed to 3 or more professional journals.

Interest in joining professional association

The respondents were asked if they would be interested in joining one professional association that would represent and speak for all health educators/health promoters and administrators in the province. If their responses were "No" or "Not sure", the investigator wanted to know why. Twenty respondents (52.7%) indicated they would be willing to join an association. Six respondents (19.7%) said no, while 12 respondents (31.6%)

were not sure. The following concerns, questions, and comments were given for saying no or not sure.

"Diversity of interests among health educators"

"Time constraints"

"Will depend on association's statement of purpose"

"One association cannot meet all needs"

"How would rural areas be included"

"Could an organization that large be active?"

"Already associated with a group of health educators - A.S.H"

"I consider the likelihood of such an association's survival remote. I have some experience in the area"

"Need more information"

"Would this help style or content best?"

"Unsure of its relevances"

"I worry about the increasing expertization of this field"

"Would like to know on what type of issues the association would speak, that is, greater need for networking"

"I belong to A.S.H. which is an organization that meets my needs"

These responses seem to lend some support to the recommendation made by Beazley (1984), that one professional association be established as the collective voice for all health educators.

Necessity of in-service training

The respondents were asked if they felt that in-service training was necessary for them to keep abreast with changes in their fields. Further, if

their responses were "no" or "not really", the investigator wanted to know why. Thirty-four respondents (90%) felt that in-service training was either "very much necessary" or "necessary" to keep up-to-date in their areas. No respondent said no, but four respondents indicated "not really". The reasons these individuals indicated include: "Self-teaching is more important"; "the in-service I need relates to research survey and interpretation techniques"; "it is hard to separate in-service from development"; "At this point, I am unsure exactly what my field is".

This relatively high percentage of health educators in Manitoba indicating that in-service training was very much necessary in their job is consistent with the findings of other studies. Matthews et al (1979) found among registered nurses that 88% of their respondents believed that continuing education activities (which can come in the form of in-service training) were necessary to maintain professional competence.

Willingness to participate in in-service training programs

Finally, the investigator wanted to know if respondents would be willing to participate in in-service training programs in their respective areas. Thirty-one of the 38 respondents (81.6%) indicated that they would "most certainly" participate in such programs. The only concern expressed by these individuals is that "such programs are not readily available. Seven respondents felt that they were not sure, or that they can only participate "if they have to" or not participate at all. The concerns expressed by these people included how to include such programs in their budget/workplan; "Depends entirely on what is offered and by whom"; "Depends on subject

area". This strong desire to participate in in-service training expressed equally by both health educators and administrators in Manitoba suggests that there should be some form of intensive and on-going program of professional development throughout all of, or at least a substantial part of, the health educators' career. This suggestion is supported by the fact that a typical health educator in Manitoba, and elsewhere, may have come from a University staff, public school, industry, or a University graduate school.

To summarize the demographic information pertaining to health educators and administrators in Manitoba, the following points must be noted:

1. Educational levels of health educators and administrators in Manitoba were varied and diversified, but the majority of them (86%) were recipients of bachelor's degrees or higher.
2. More than half of those surveyed have 11 or more years of experience with the field of health education.
3. Major fields of specialization of the respondents also were varied, ranging from school health education, through community/public health education, patient education, physical education, to any combinations of the above.
4. The description of the job of the respondents was split between primarily administrative functions, direct health education delivery, and a combination of the two.
5. The majority of health educators in Manitoba were affiliated with several professional associations but less than half have membership in health education associations.

6. Over half of the individuals surveyed expressed interest in joining one representative professional association, and another third were not sure. (7) Over 80% of health educators and administrators in Manitoba perceive in-service training necessary in their jobs, and about the same number expressed willingness to participate in in-service training programs.

There are several implications of these demographic data. They can assist in:

1. Providing important feedback to professional preparation programs.
2. Identifying strengths and weaknesses of the profession from the standpoint of practitioners.
3. Predicting in-service training needs of health educators and administrators.
4. Determining the over all status of the educators academic preparation.
5. Making useful comparisons between professional characteristics of health educators and administrators.

To present and discuss the following results of this study, two assumptions made for the purpose of this analysis must be noted:

1. An important competence is operationally defined as a competence receiving a mean score of 3.0 or higher on a five-point scale.
2. A mean score approaching 5 indicates a high degree of importance for either the performance of health education activities or for in-service training needs of the respondents; a score ranging from 3 to 3.5 indicates a perceived medium degree of importance; and a score less than 3 indicates a low priority of importance in the view of the respondents. The statements

from the questionnaire instrument are repeated in an abbreviated form in the tables together with their ranks, their mean values, and their statement numbers.

Research question # 1

What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by health educators and their administrators? What is the relative importance of these competencies?

The 38 respondents rated each of the 29 items on a five-point scale for their importance in performing health education activities. A mean response for all respondents was established for each competence statement. The overall ranking of the statements by health educators and administrators is shown in Appendix B. Several observations can be made from these results:

1. All the 29 items were rated important (i.e. a mean score of 3.0 or higher) by both health educators and administrators for the performance of health education activities, hence, based on the stated assumptions, all statements can be considered important to health educators and administrators for the performance of health education activities. This is consistent with what R. E. Norton found among vocational administrators. Norton (1980) found that 166 of the 191 statements were competencies important (i.e. mean score of 3.0 or higher on a five-point scale) to the job of vocational administrators.

2. Administrators, as a group, rated 25 of the 29 statements in all

categories higher (in terms of mean values) than health educators. Notice that the same competence, the "ability to identify behavior affecting program concerns", was ranked last by both health educators and administrators. However, since the respondents were instructed to "discriminate" between higher and lower levels of importance, the scores can further be discussed in that respect.

Table 1 presents the rank-ordered list of the six highest ranking competencies for the performance of health education activities as perceived by health educators and administrators. In analyzing the information on this table, several comparasons can be made. For example, the use of public speaking skills to present health information seems to be more important to health educators than to administrators, while the ability to interprete the results of program evaluation appears to be more important to administrators than health educators. This observation is consistent with the findings of Sutherland (1977) who found that "competencies such as small group process and oral and/or non-verbal communication skills were ranked most highly among health educators (p.4)". From Table 1, it is observed that four of the six highest ranking statements were common to both health educators and administrators, indicating an apparent agreement between health educators and administrators on the relative importance of these competencies. The "dissenting" statements related to human relations for health educators (items #14 and #26) and program evaluation for administrators (items #27 and #15). This perhaps illustrates a clear distinction between the core duties of these groups.

Table 1

Highest priority needs for the performance of health education activities as perceived by health educators and administrators.

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
1	4.370	3) Use public speaking skills to present health and health information	1	4.909	27) Interprete results of program evaluation
1	4.330	9) Describe programs to health education professionals, decission-makers, consumers and the public	2	4.727	3) Use public speaking skills to present health and health information
2	4.296	4) Predict outcomes of alternative health education on behavior	2	4.727	15) Identify potential facilitators and barriers to the specific program
3	4.185	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	3	4.545	4) Predict outcomes of alternative health education on behavior
			3	4.545	9) Describe programs to health education professionals, decission-makers, consumers and the public
4	4.148	19) Formulate measurable educational objectives	4	4.455	19) Formulate measurable educational objectives
4	4.148	26) Secure the cooperation of those affecting and affected by the program			

Research question #2

What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by the health educators and their administrators?. What is the relative importance of these competencies.

In terms of in-service training needs, and as depicted in Appendix C, health educators considered 27 of the 29 competence statements important for in-service training needs (ie a score of 3.0 or higher) whereas the administrators considered 19 Of the 29 statements important. The two statements considered to be of low importance by health educators were also considered the same by administrators. It appears that health educators, on the average, place more importance, in terms of mean scores, on 17 of the 29 items than the administrators. The administrators seem to perceive more need for in-service training of health educaors in the areas of management and evaluation of health education programs (i.e. monitoring health education programs; creating opportunity for voluntary participation; and interpreting the results of program evaluation). Health educators, on the other hand, perceive more need for in-service training in the areas of communication and implementation of health education programs (i.e. predicting the outcomes of health education strategies on behavior; securing the cooperation of those affecting and affected by the program; and describing programs to health education professionals, decision-makers, consumers, and the public). See Appendix C.

Table 2 presents the six highest ranking statements for in-service training needs as perceived by health educators and administrators. Several discrepancies can be observed in this table, for example, item #24 was ranked first by administrators but was not among the top six by health educators, while item #4) ranked first by health educators was ranked 4th by administrators. Also, upon reviewing table 2, it can be noted that none of the 6 highest ranking competencies for in-service training needs is common for both health educators and administrators. This observation seems to contrast the apparent agreement of perceptions of these groups for the importance of several competencies for the performance of health health education activities (see Table1). Further analysis indicates that nearly all the six highest important competencies to health educators relate to communication or program implementation, whereas the competencies for in-service training needs for administrators relate to program management and evaluation.

To sum up the health educators' and administrators' perceptions of the importance of needed competencies for the performance of health education activities and for the in-serevice training needed by them, the following observations can be made:

1. Health educators perceive all the 29 items on the instrument important for the performance of health education activities, but perceived only 27 of the 29 items important for in-service training needed by them.
2. Administrators perceived all the 29 items on the questionnaire important for the performance of health education activities, but perceived only 19 of the 29 items important for their in-service training needs.

Table 2

Highest priority needs for In-service training programs as perceived by health educators and administrators.

Rank	Mean	Health Educators (N=27)	Rank	Mean	Administrators (N=11)
1	3.704	4) Predict outcomes of alternative health education on behavior	1	3.818	24) Monitor the program to assure that it is being implemented as designed or modified
1	3.704	26) Secure the cooperation of those affecting and affected by the program	2	3.727	8) Create opportunity for voluntary participation in health education activities
2	3.667	9) Describe programs to health education professionals, decission-makers, consumers and the public	2	3.727	27) Interprete results of program evaluation
3	3.630	11) Participate in health policy planning	3	3.636	15) Identify potential facilitators and barriersto the specific program
4	3.593	16) Secure administrative support for the program	3	3.636	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
5	3.519	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	3	3.636	25) Participate in specification of instruments for data collection

3. There is no difference between the perceptions of health educators and administrators in the importance of the six highest ranking competence statements for the performance of health education activities. This is consistent with the findings of other investigators. Chen (1983) found that selected comparisons of responses from directors and practitioners indicated that perceptions of health education services provided were more or less the same.

4. There appears to be a difference in perceptions of these competencies for in-service training needs.

Research question #3 (a)

To what extent do the priorized competencies differ between health educators and administrators and in terms of their practice settings?

To respond to this research question, three work settings were considered in this investigation: Community organization setting; Government setting; and Academic setting. The results were anlyzed with respect to these three settings and for their importance in the performance of health education activities and in-service training needs.

Community organization setting

Health educators and administrators in the community setting perceive all the 29 competence statements to be important (i.e. a mean score of 3.0 or higher) for the performance of health education activities. In terms of the in-service training needed by these respondents, health educators perceived 28 of the 29 statements important while administrators perceive 25 of the 29 statements, important for health

educator in-service training needs.

Table 3 presents the six highest priority needs for the performance of health education activities as perceived by health educators and administrators practising in the community work setting. From this table, the use of public speaking skills to present health and health information appears to be of highest importance to both health educators and administrators. Two other competence statements - the ability to train personnel to carry out programs as needed, and the ability to monitor programs to assure that it is being implemented as designed or modified - are common to both health educators and administrators among the higher ranking competence statements.

Table 4 presents the six highest priority needs for in-service training needed by health educators as perceived by health educators and administrators practising in the community setting. The "ability to predict outcomes of alternative health education strategies on behavior" seems to be of highest importance for in-service needed by health educators in this setting. This competence implies being able to describe concepts of human behavior (psychological, sociological, anthropological, and educational) and being able to describe probable health education outcomes given the resources available. The "ability to articulate the viewpoints of others" is also perceived to be of highest importance for in-service needs. This competence implies relating views of one audience to others such as translating culture-bound items and assessing perceptions of audience. The third competence in first place for in-service training needs is the "ability to train personnel to carry out programs as needed". This implies describing

Table 3

Highest priority needs for the performance of health education activities as perceived by health educators and administrators practising in the community organization settings

Rank	Mean	Health Educator (N=13)	Rank	Mean	Administrators (N=7)
1	4.308	3) Use public speaking skills to present health and health information	1	4.857	3) Use public speaking skills to present health and health information
1	4.308	4) Predict outcomes of alternative health education on behavior	2	4.571	1) Use mass media to provide health information
2	4.231	22) Train personnel to carry out programs as needed	2	4.571	15) Identify potential facilitators and barriers to the specific program
2	4.231	23) Prepare educational materials as needed	2	4.571	19) Formulate measurable educational objectives
2	4.231	24) Monitor the program to assure that it is being implemented as designed or modified	2	4.571	22) Train personnel to carry out programs as needed
2	4.231	26) Secure the cooperation of those affeecting and affected by the program	2	4.571	24) Monitor the program to assure that it is being implemented as designed or modified

Table 4

Highest priority needs for In-service training as perceived by health educators and administrators practising in the community organization settings

Rank	Mean	Health Educators (N=13)	Rank	Mean	Administrators (N=7)
1	3.846	4) Predict outcomes of alternative health education on behavior	1	4.143	8) Create opportunity for voluntary participation in health education activities
1	3.846	6) Articulate the viewpoints of others	1	4.143	19) Formulate measurable educational objectives
1	3.846	22) Train personnel to carry out programs as needed	1	4.143	25) Participate in specification of instruments for data collection
2	3.769	2) Use group process skills to provide information	2	4.000	27) Interprete results of program evaluation
2	3.769	9) Describe programs to health education professionals, decission-makers, consumers and the public	3	3.857	9) Describe programs to health education professionals, decission-makers, consumers and the public
2	3.769	25) Participate in specification of instruments for data collection	3	3.857	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program

the processes of assessing training needs, listing skills needed, reviewing skills of available personnel, and comparing skills with program requirements. Administrators in community organization setting perceived three competence statements to be of highest importance for in-service training needed by health educators. One is the "ability to create opportunity for voluntary participation in health education activities" (i.e. describing the value of voluntary participation in health education to affected individuals, and the value of greater cooperative efforts, and also showing relationship between health and health behavior). Another competence is the "ability to formulate measurable educational objectives" (i.e. describing criteria for setting educational priorities, understanding different types of objectives and identifying components of a well-written objective). The third competence of highest importance in the opinion of the administrators is the "ability to participate in specification of instruments for data collection" (i.e. describing the advantages and disadvantages of "home-made" and commercial instruments). For the rest of the highest ranking competencies see Table 4.

In summary, of the six highest ranking statements for the performance of health education activities (Table 3), three statements are common to both health educators and administrators (items #3, #22, and #24). Of the six highest ranking statements for in-service training needs (Table 4), only two competencies are common to both health educators and administrators (items #9 and #25).

Government setting

Health educators and administrators in the Government setting perceived all the 29 items on the questionnaire important (i.e. mean score of 3.0 or higher) for the performance of health education activities. However, for in-service training needs, health educators in the government setting perceived 22 of the 29 statements important, while administrators in the same setting perceived only 16 of the 29 statements important for in-service training needs.

Table 5 presents the six highest ranking competencies for the performance of health education activities as perceived by health educators and administrators. Health educators perceived the "ability to describe programs to health education professionals, decision-makers, consumers and public" as the most important competence for the performance health education activities. This competence implies using written and verbal techniques to describe program characteristics such as preparing overhead transparencies on program aspects, identifying potential audiences for communications about health education programs, and listing indicators of program success for others. Administrators perceived six competencies to be (equally) of highest importance for health education activities (see Table 5). Notice that all six statements received a perfect score of 5.0 from these administrators. Also, this table shows that three of the six competence statements are common to both health educators and administrators (items #9, #4, and #15).

Table 5

Highest priority needs for the performance of health education activities as perceived by health educators and administrators practising in the Government settings

Rank	Mean	Health Educator (N=12)	Rank	Mean	Administrators (N=4)
1	4.500	9) Describe programs to health education professionals, decission-makers, consumers and the public	1	5.000	4) Predict outcomes of alternative health education on behavior
2	4.417	3) Use public speaking skills to present health and health information	1	5.000	9) Describe programs to health education professionals, decission-makers, consumers and the public
2	4.417	14) Identify social, cultural, environmental, organizational, and growth and development factors that affect health behavior needs, and interests	1	5.000	15) Identify potential facilitators and barriers to the specific program
			1	5.000	16) Secure administrative support for the program
3	4.333	4) Predict outcomes of alternative health education on behavior	1	5.000	25) Participate in specification of instruments for data collection
4	4.250	11) Participate in health policy planning	1	5.000	29) Promote integration of health education programs with other facets of organizational activities
4	4.250	15) Identify potential facilitators and barriers to the specific program			

Table 6 presents the six highest priority competencies for in-service training needs as perceived by health educators and administrators practising in the government setting. Health educators perceived two competence statements to be of highest importance: one is the "ability to participate in health policy planning" (i.e. skills in defining the concepts of health policy planning, recognizing educational aspects of health policy, and articulating health education's role in policy proposals). The second competence is the "ability to secure cooperation of those affecting and affected by the program" i.e. skills in asking for cooperation, safeguarding rights of individuals involved, and skills in confidential record-keeping. Administrators in the government setting perceived the "ability to analyze political processes related to health and health education" to be of the highest importance for in-service training needs. This competence implies describing political processes as they apply to varying interests, and understanding position of influence, and matching knowledge of political processes to a given audience as they apply to health education. Five of the 8 highest ranking competence statements for in-service training needs were common to both health educators and administrators practising in the government setting (items #11, #14, #13, #4, and #12).

Academic setting

Health educators in the academic setting rated all the 29 competence statements important for the performance of health education activities (i.e. a mean score of 3.0 or higher). There were no administrators practising in the academic setting in this study.

Table 6

Highest priority needs for In-service training as perceived by health educators and administrators practising in the Government settings

Rank	Mean	Health Educator (N=12)	Rank	Mean	Administrators (N=4)
1	3.917	11) Participate in health policy planning	1	3.750	12) Analyze political processes related to health and health education
1	3.917	26) Secure the cooperation of those affecting and affected by the program	2	3.500	4) Predict outcomes of alternative health education on behavior
2	3.833	16) Secure administrative support for theprogram	2	3.500	11) Participate in health policy planning
3	3.75	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	2	3.500	13) Gather data about health-related behaviors, needs, and interests
4	3.667	13) Gather data about health-related behaviors, needs, and interests	2	3.500	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests
4	3.667	27) Interprete results of program evaluation	2	3.500	15) Identify potential facilitators and barriersto the specific program
5	3.583	9) Describe programs to health education professionals, decission-makers, consumers and the public	2	3.500	25) Participate in specification of instruments for data collection
6	3.5	4) Predict outcomes of alternative health education on behavior	2	3.500	29) Promote integration of health education programs with other facets of organizational activities
6	3.5	12) Analyze political processes related to health and health education			

Table 7 presents the 18 highest ranking competence statements for the performance of health education activities. Notice in this table that all these highest ranking statements are rated in the first position, indeed, the remaining 11 statements are split between the second and the third positions by health educators in the academic setting.

Table 8 presents the nine highest competence statements for in-service training needs as perceived by health educators in the academic setting. Notice that the "ability to predict outcomes of alternative health education strategies on behavior" which was rated first as an in-service training need (Table 8) was not even among the 18 highest ranking statements for importance in performing health education activities (Table 7).

To summarize the similarities and differences among the highest ranking competencies by practice settings of health educators and administrators, several patterns are noted:

1. Some competencies were ranked similar in importance no matter the setting of practice, for example, the ability to use public speaking skills to present health information was ranked first by both health educators and administrators practising in the community organization and academic settings (see Tables 3 and 7), and also ranked second by respondents in the government setting (Table5).

2. Other competencies were ranked differently in various practice settings, for example, the ability to use mass media to provide health information ranked second by administrators in the community setting but ranked eighth by health educators in the community setting and ninth and

Table 7

Highest priority needs for the performance of health education activities as perceived by health educators practising in the Academic settings

Rank	Mean	Health Educator (N=2)	Rank	Mean	Health Educators (contd)
1	4.500	2) Use group process skills to provide information	1	4.500	17) Identify specific behaviors affecting program concerns
1	4.500	3) Use public speaking skills to present health and health information	1	4.500	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
1	4.500	6) Articulate the viewpoints of others	1	4.500	19) Formulate measurable educational objectives
1	4.500	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question	1	4.500	21) Determine a sequence for educational experience
1	4.500	8) Create opportunity for voluntary participation in health education activities	1	4.500	24) Monitor the program to assure that it is being implemented as designed or modified
1	4.500	9) Describe programs to health education professionals, decission-makers, consumers and the public	1	4.500	25) Participate in specification of instruments for data collection
1	4.500	10) Use persuasive strategies applicable to a given situation	1	4.500	26) Secure the cooperation of those affeecting and affected by the program
1	4.500	11) Participate in health policy planning	1	4.500	29) Promote integration of health education programs with other facets of organizational activities
1	4.500	12) Analyze political processes related to health and health education			
1	4.500	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests			

Table 8

Higher priority needs for In-service training as perceived by health educators practising in the Academic settings

Rank	Mean	Health Educators (N=2)
1	4.000	4) Predict outcomes of alternative health education on behavior
1	4.000	25) Participate in specification of instruments for data collection
1	4.000	27) Interprete results of program evaluation
2	3.500	8) Create opportunity for voluntary participation in health education activities
2	3.500	11) Participate in health policy planning
2	3.500	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests
2	3.500	15) Identify potential facilitators and barriersto the specific program
2	3.500	16) Secure administrative support for theprogram
2	3.500	22) Train personnel to carry out programs as needed

sixth respectively by health educators and administrators in the government setting. Health educators in the academic setting ranked this competence second.

3. Health educators and administrators practicing in differing settings perceived the importance of several competencies differently.

4. A possible implication of these observations is that agencies responsible for providing in-service training programs should also consider the needs and interests of these groups.

5. Three of the six highest ranking competencies for in-service training needs as perceived by health educators came fron the communication category (that is, predict outcomes of alternative health education strategies on behavior; describe programs to health education professionals, decision-makers, consumers and the public; and participate in health policy planning), while three of six highest ranking statements for in-service training needs as perceived by administrators came from the category of evaluation (that is, monitor the program to assure that it is being implemented as designed or modified; interpret results of program evaluatiion; and participate in specification of instrument for data collection).

Research question #3 (b)

To what extent do the priorized competencies differ between health educators and their administrators and in terms levels of experience?

To address this research question, three levels of experience were chosen: Health educators and administrators with 1-5 years of experience;

Health educators and administrators with 6-10 years of experience; and Health educators and administrators with 11 or more years of experience. The results are reviewed with respect to these levels of experience and for the importance of the competence statements for the performance of health education activities and for in-service training needs.

1-5 years experience level

Health educators with 1-5 years of experience rated all the 29 competencies important for the performance of health education activities. Administrators with the same level of experience rated 27 of the 29 statements important for the performance of health education activities.

Table 9 presents the highest ranking competencies for the performance of health education activities in the opinion of health educators and administrators. Notice that the same competence - the ability to describe programs to health professionals, decision-makers, consumers and the public - is rated first by both health educators and administrators. Three other competencies - items #4, #15, and #28 - are common to health educators and administrators among the highest ranking statements.

Health educators with 1-5 years rated 22 of the 29 items important for in-service training needs. Administrators with the same level of experience rated 23 of the 29 competencies important for in-service training needed by health educators.

Table 9

Highest priority needs for the performance of health education activities as perceived by health educators and administrators with 1-5 years of experience

Rank	Mean	Health Educators (N=8)	Rank	Mean	Administrators (N=3)
1	4.750	9) Describe programs to health education professionals, decission-makers, consumers and the public	1	5.000	9) Describe programs to health education professionals, decission-makers, consumers and the public
2	4.375	3) Use public speaking skills to present health and health information	1	5.000	15) Identify potential facilitators and barriersto the specific program
2	4.375	11) Participate in health policy planning	1	5.000	16) Secure administrative support for the program
2	4.375	29) Promote integration of health education programs with other facets of organizational activities	2	4.667	1) Use mass media to provide health information
3	4.250	4) Predict outcomes of alternative health education on behavior	2	4.667	4) Predict outcomes of alternative health education on behavior
3	4.250	14) Identify social, cultural, environmental, organizational, and growth and development factors that affect health behavior needs, and interests	2	4.667	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question
3	4.250	15) Identify potential facilitators and barriers to the specific program	2	4.667	19) Formulate measurable educational objectives
3	4.250	28) Report the processes and results of evaluation to those interested	2	4.667	24) Monitor the program to assure that it is being implemented as designed or modified
			2	4.667	27) Interprete results of program evaluation
			2	4.667	28) Report the processes and results of evaluation to those interested

Table 10 presents the eight highest ranking competencies for in-service training needs in the opinion of health educators and administrators. Health educators with 1-5 years of experience perceived "the ability to describe programs to health professionals, decision-makers, consumers, and the public" as the most important for in-service training. Administrators with the same level of experience perceived "the ability to predict outcomes of alternative health education strategies on behavior" and "the ability to analyse political processes related to health and health education" as the most important competencies for health educator in-service training needs.

Two of these highest ranking competencies are common to both health educators and administrators (items #25 and #4).

6-10 years experience level

Health educators with 6-10 years of experience perceived all the the 29 items important for the performance of health education activities. Administrators rated 28 of the 29 statements as important.

Table 11 presents the highest priority needs for the performance of health education activities in the opinion of health educators and administrators. Notice that the same competence rated highest by health educators and administrators with 1-5 years experience (Table 10) also is rated highest by health educators with 6-10 years of experience. All the six highest ranking competencies for administrators received a perfect score of 5.0. Only one competence was common to both health educators and administrators (i.e. predict outcomes of alternative health education

Table 10

Highest priority needs for In-service training as perceived by health educators and administrators with 1-5 years of experience

Rank	Mean	Health Educators (N=8)	Rank	Mean	Administrators (N=3)
1	4.250	9) Describe programs to health education professionals, decission-makers, consumers and the public	1	4.667	4) Predict outcomes of alternative health education on behavior
2	4.000	1) Use mass media to provide health informatiom	1	4.667	12) Analyze political processes related to health and health education
2	4.000	26) Secure the cooperation of those affecting and affected by the program	2	4.333	8) Create opportunity for voluntary participation in health education activities
3	3.750	16) Secure administrative support for the program	2	4.333	15) Identify potential facilitators and barriers to the specific program
4	3.625	4) Predict outcomes of alternative health education on behavior	2	4.333	24) Monitor the program to assure that it is being implemented as designed or modified
4	3.625	11) Participate in health policy planning	2	4.333	25) Participate in specification of instrument for data collection
4	3.625	25) Participate in specification of instrument for data collection	2	4.333	27) Interprete results of program evaluation
4	3.625	29) Promote integration of health education programs with other facets of organizational activities			

Table 11

Highest priority needs for the performance of health education activities as perceived by health educators and administrators with 6-10 years of experience

Rank	Mean	Health Educators (N=6)	Rank	Mean	Administrators (N=3)
1	4.333	9) Describe programs to health education professionals, decission-makers, consumers and the public	1	5.000	3) Use public speaking skills to present health and health information
1	4.333	16) Secure administrative support for the program	1	5.000	4) Predict outcomes of alternative health education on behavior
1	4.333	19) Formulate measurable educational objectives	1	5.000	11) Participate in health policy planning
2	4.167	4) Predict outcomes of alternative health education on behavior	1	5.000	19) Formulate measurable educational objectives
2	4.167	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question	1	5.000	25) Participate in specification of instruments for data collection
2	4.167	26) Secure the cooperation of those affecting and affected by the program	1	5.000	29) Promote integration of health education programs with other facets of organizational activities
2	4.167	27) Interprete results of program evaluation			

strategies on behavior).

Health educators with 6-10 years of experience perceived 26 of the 29 competencies important for in-service training needed by them. Administrators with the same level of experience perceived only 20 of 29 competencies important for health educator in-service training needs in their opinion.

Table 12 presents the highest ranking needs for in-service training for both health educators and administrators with 6-10 years of experience. Health educators perceive "the ability to participate in health policy planning" as the most important competence for in-service training. This competence implies defining concepts of health policy planning and illustrating contributions of health education to applications of health policy. Administrators perceived the "ability to articulate the viewpoints of others" as the highest ranking competence for in-service training needed by health educators. Four of the seven highest ranking competencies are common among the highest ranking statements to both health educators and administrators with 6-10 years of experience.

11 or more years experience level

Health educators and administrators with 11 or more years of experience perceived all the 29 competencies as important for the performance of health education activities.

Table 12

Highest priority needs for In-service training as perceived by health educators and administrators with 6-10 years of experience

Rank	Mean	Health Educators (N=6)	Rank	Mean	Administrators (N=3)
1	4.333	11) Participate in health policy planning	1	4.667	6) Articulate the viewpoints of others
2	4.000	12) Analyze political processes related to health and health education	2	4.333	9) Describe programs to health education professionals, decission-makers, consumers and the public
2	4.000	13) Gather data about health-related behaviors, needs, and interests	2	4.333	27) Interprete results of program evaluation
3	3.833	9) Describe programs to health education professionals, decission-makers, consumers and the public	3	4.000	24) Monitor the program to assure that it is being implemented as designed or modified
3	3.833	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	3	4.000	25) Participate in specification of instruments for data collection
3	3.833	15) Identify potential facilitators and barriersto the specific program	4	3.667	4) Predict outcomes of alternative health education on behavior
3	3.833	28) Report the processes and results of evauation to those interested	4	3.667	11) Participate in health policy planning
			4	3.667	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests
			4	3.667	19) Formulate measurable educational objectives
			4	3.667	28) Report the processes and results of evauation to those interested

Table 13 presents the seven highest priority needs for the performance of health education activities as perceived by health educators and administrators. The "use of group process skills to provide information" is one of the three competencies perceived by health educators as of highest importance. This competence implies distinguishing appropriate group process techniques for providing information on a health topic to a particular audience. The "use of public speaking skills to present health and health information" is the second, and the third competence perceived to be of highest importance is the "ability to monitor programs". Administrators perceive the ability to use public speaking skills and the ability to interprete results of program evaluation as the highest ranking competencies for the performance of health education activities.

For in-service training needs, the administrators with 11 or more years of experience percieved only 14 of the 29 statements as important (i.e. a mean score of 3.0 or higher) for in-service training needed by health educators. Health educators perceived 27 of the 29 statements as important for their in-service training needs.

Table 14 presents the highest ranking statements as perceived by health educators and administrators for in-service training needed by health educators. Health educators perceived the "ability to predict outcomes of alternative health education strategies on behavior" as being of highest importance for in-service training. Administrators perceived four competence statements (equally) to be of highest importance for health educator in-service training needs (see Table 14). Four of the seven highest

Table 13

Highest priority needs for the performance of health education activities as perceived by health educators and administrators with 11 or more years of experience

Rank	Mean	Health Educators (N=13)	Rank	Mean	Administrators (N=5)
1	4.667	2) Use group process skills to provide information	1	4.800	3) Use public speaking skills to present health and health information
1	4.667	3) Use public speaking skills to present health and health information	1	4.800	27) Interprete results of program evaluation
1	4.667	24) Monitor the program to assure that it is being implemented as designed or modified	2	4.600	15) Identify potential facilitators and barriersto the specific program
2	4.556	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	2	4.600	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
			3	4.400	2) Use group process skills to provide information
3	4.444	8) Create opportunity for voluntary participation in health education activities	3	4.400	5) Articulate the purpose, theory, concepts, andprocesses of health education
3	4.444	10) Use persuasive strategies applicable to a given situation	3	4.400	16) Secure administrative support for the program
3	4.444	26) Secure the cooperation of those affectingand affected by the program	3	4.400	26) Secure the cooperation of those affecting and affected by the program

Table 14

Highest priority needs for In-service training as perceived by health educators and administrators with 11 or more years of experience

Rank	Mean	Health Educators (N=13)	Rank	Mean	Administrators (N=5)
1	3.778	4) Predict outcomes of alternative health education on behavior	1	3.600	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question
2	3.667	16) Secure administrative support for the program	1	3.600	8) Create opportunity for voluntary participation in health education activities
2	3.667	24) Monitor the program to assure that it is being implemented as designed or modified	1	3.600	15) Identify potential facilitators and barriersto the specific program
3	3.556	8) Create opportunity for voluntary participation in health education activities	1	3.600	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
3	3.556	14) Identify social, cultural, enviromental, organizational, and growth and development factors that affect health behavior, needs, and interests	2	3.400	5) Articulate the purpose, theory, concepts, and processes of health education
3	3.556	26) Secure the cooperation of those affeecting and affected by the program	2	3.400	24) Monitor the program to assure that it is being implemented as designed or modified
4	3.444	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program	2	3.400	26) Secure the cooperation of those affecting and affected by the program

ranking statements are common to both health educators and administrators (i.e. items #8, #26, #24, and #18).

To summarize the similarities and differences between the rankings of health educators and administrators in terms of their levels of experience, the following points must be noted:

1. Upon analyzing the data by levels of experience of health educators and administrators, it was observed that program management and evaluation competencies are more important to administrators with 11 or more years of experience than administrators with 5 or less years of experience as indicated by the rankings of items #27, #13 and 15#.

2. As depicted in Table 9, both health educators and administrators with 1-5 years of experience perceived the same competence (item #9) to be of highest importance for the performance of health education activities. In addition, this table shows that four of the eight items perceived to be of highest importance by health educators were also among the ten items perceived to be of highest importance by administrators.

3. In contrast to this perception, Table 12 shows that only two of the seven items perceived to be of greatest need for in-service training by health educators were perceived the same by administrators (items #4 and #25). This level of experience (1-5 years) is equivalent to what Beazley (1983) called "entry-level health educators". Beazley (1983) found that the entry-level health educators, regardless of professional focus, performed the group of activities with similar frequency.

4. Health educators and administrators with 6-10 years of experience differed in perception about the six highest ranking competencies for the

performance of health education (except item #9). None of the 10 items of highest importance to administrators with 1-5 years of experience (Table 9) belongs to the six competencies of highest importance to administrators with 6-10 years of experience (Table 10). Furthermore, only 2 items (#9 and #4) considered highly important by health educators with 1-5 years (Table 9) were considered the same by health educators with 6-10 years of experience (Table 10).

5. Health educators and administrators with 11 or more years of experience perceived three competencies somewhat similar in importance (ie. items #2, #3, & #26 in Table 13) for the performance of health education activities.

Research question #3 (c)

To what extent do the priorized competencies differ between health educators and their administrators and in terms of the categories of the competence statement?

To respond to this research question, the 29 items in the questionnaire were grouped into five categories: (A) Communicating health and health education, needs, concerns and resources; (B) Determinig the appropriate focus for health education; (C) Planning health education programs in response to identified needs: (D) Implementing planned health education programs; and (E) Evaluating health education programs.

Table 15 presents the over-all ranking of the five categories by health educators and administrators for both the performance of health education activities and for in-service traininig needed by health educators. Several observations can be made from this table:

1. All categories received a mean score of 3.0 or higher by both health educators and administrators for both the performance of health education activities and for in-service training needs. One can therefore conclude, based on the assumptions presented on page 63, that all the categories are important for these two needs.

2. Notice that administrators, as a group, rated all categories higher for health education activities than health educators, while health educators, as a group, rated all categories (except Evaluation category) higher than administrators for in-service training needed by health educators. The evauation category being the exception is particularly notable, and suggests that final evaluation is more important to administrators than the health educators.

Table 16 presents the ratings of the five categories for their importance in performing health education activities by the practice settings of the respondents. All categories were rated important by both health educators and administrators in all settings.

Table 17 presents the ratings of the five categories for their importance in in-service training needs. Health educators in the community setting perceived all categories important for in-service training needs. Health educators in the government setting perceived all categories (except category D) important for in-service training needs. Health educators in the

Table 15

The Ratings of the categories by health educators and administrators for the performance of health education activities and for in-service training needs.

CATEGORY	For Health Education activities Mean	For In-service Training Needs Mean
A: Communicating health and health education needs, concerns and resources	3.923 4.224	3.302 3.182
B: Determining the appropriate focus for health education	4.019 4.500	3.444 3.400
C: Planning health education programs in response to identified needs	3.857 4.429	3.217 3.000
D: Implementing planned health education programs	3.926 4.152	3.247 3.121
E: Evaluating health education	3.948 4.418	3.422 3.509

Table 16

The Ratings of the categories for the performance of health education activities as perceived by health and administrators by practice settings.

CATEGORY	HEALTH EDUCATORS			ADMINISTRATORS	
	Community Organization	Government	Academic	Community Organization	Government
A: Communicating health and health education needs, concerns and resources	3.833	3.958	4.292	4.211	4.247
B: Determinig the appropriate focus for health education	3.808	4.202	4.250	3.714	3.875
C: Planning health education programs in response to identified needs	3.868	3.774	4.286	3.939	4.036
D: Implementing planned health education programs	4.231	3.556	4.167	4.429	3.667
E: Evaluating health education program	4.062	3.767	4.300	4.171	4.850

Table 17

The Ratings of the categories for In-service training needs as perceived by health and administrat by practice settings.

CATEGORY	HEALTH EDUCATORS			ADMINISTRATORS	
	Community Organization	Government	Academic	Community Organization	Government
A: Communicating health and health education needs, concerns and resources	3.519	3.118	3.000	3.333	2.917
B: Determinig the appropriate focus for health education	3.231	3.792	2.750	3.143	3.500
C: Planning health education programs in response to identified needs	3.352	3.202	2.429	3.286	2.500
D: Implementing planned health education programs	3.718	2.778	3.000	3.619	2.250
E: Evaluating health education program	3.462	3.483	2.800	3.686	3.200

academic setting perceived only two of the five categories marginally important for their in-service training needs (i.e communicating health education, and implementing planned health education programs). Notice that category D, perceived somewhat of low importance by health educators in the government setting, is about the only category percieved as important by health educators in the academic setting. Administrators in the community setting perceive all the categories important for in-service training needs. Administrators in the government setting perceived 2 of the 5 categories as important (i.e. B & E).

To summarize the similarities and differences of perceptions between health educators and administrators in terms of the categories of health educator competence statement, the following points are noted:

1. Health educators rated as more important for in-service training needs in all the categories except the category of evaluation, while administrators perceive more importance for the performance of health education activities than health educators.

2. Health educators practising in a community setting perceived greater importance in the category B (Table 16) than administrators practising in the same setting.

3. Some competencies are rated higher than others in one or two settings, for example, academic setting health educators displayed different perceptions of ranking than community-based practitioners.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This investigation was designed to:

1. Determine the health educators' perceptions and administrators' perceptions of competencies needed by practicing health educators in the province of Manitoba.
2. Determine the relative priority of needed competencies as perceived by health educators and administrators.
3. Determine the degree to which perceived in-service training needs differ between health educators and their administrators.
4. Determine the extent to which priorized competencies of health educators and administrators differ according to their practice settings, number of years associated with health education and categories of competencies.

The study sought answers to the following research questions:

1. What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by the health educators and administrators in charge of employing health educators? What is the relative importance of these competencies?
2. What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by health educators and administrators in charge of employing health educators? What is the relative importance of these competencies?

3. To what extent do these priorized competencies differ between health educators and their employers, and in terms of practice setting, experience, and category of competence statement?

The purpose of this chapter is to:

1. Summarize the main points in the procedures employed in this investigation.
2. Present the summary of the major findings.
3. Present the main conclusions drawn from the findings of this study.
4. Make some recommendations based upon the projected utility of the results of this investigation.

SUMMARY OF PROCEDURES OF INVESTIGATION

The literature review indicated that various methodologies such as mail surveys, checklists, structured interviews, and Developing A Curriculum (DACUM) approach have been used to assess the education needs of health educators, but most researchers have used either a structured interview or a questionnaire and some type of likert scales to obtain respondents' perceptions; and that high response rates are not unusual for mail questionnaires.

The procedures used in this investigation was a descriptive survey pattern and employed a written questionnaire technique. This technique has the following advantages:

1. It is relatively easy to distribute, and can be filled out fairly quickly. Distribution is usually by mail, however, it is possible to distribute questionnaires on a person-to-person basis.

2. It allows for selection from specified alternatives, and therefore reduces the chances of getting useless responses. This is particularly true for the closed-ended or forced-choice type of questionnaire used in this study.

3. It provides desirable controls, the most desirable control being that quantifiable data are obtained allowing the use of pertinent statistical analyses such as correlation and factor analysis.

4. It permits the use of large samples and therefore increases reliability.

5. It permits the use of concise questions representing a wide range of the subjects under investigation.

Dillman (1978) suggested that in order to maximize the response rate from a written survey technique, the investigator must minimize the cost for responding to the instrument; maximize the rewards for doing so; and establish trust that rewards will be delivered.

The specific steps employed in the design of the study were to:

1. Conduct a comprehensive literature search to identify the relevant health educator competency studies.

2. Analyze the available research to select the competence statements that appear to be relevant to both health educators and their administrators in Manitoba.

3. Merge the selected competence statements into a single list.

4. Priorize these competencies through a written survey using the experiences of all known health educators and administrators of health educators in Manitoba.

5. Summarize and analyze the findings of this survey.

6. Make recommendations based on these findings to faculties and agencies charged with the preparation and hiring of health educators in the province.

The population of this study included all health educators and their administrators in Manitoba, that is, individuals who were employed in the health education/health promotion areas and who were engaged in health-related activities either administrative or direct service deivery for at least 50% of their work time. To ascertain the sample and the sample size for this study, a sample frame was developed from a review of several directories available in Winnipeg and contacts with several health personnel. The items selected for the instrument were primarily obtained from and categorized according to the report of the Bureau of Health Education (Focal Point, 1980) and several other research studies (Society for Public Health Education, 1977; Galli, 1978; Sutherland, 1977 and 1982; and Pankiewcz, 1983).

In developing the instrument, the investigator recognized that:

1. Competence statements were often so general that placing them in priority order through assessment procedures are difficult and to minimize this limitation, clear and operationalized competence statements from various sources were developed.

2. Using measures of a central tendency, that is, the mean usually brings popular needs to the top of a priority listing leaving less popular, but perhaps equally important needs towards the bottom. To minimize this problem, the investigator collected both general and specific information

about the need, that is, information about the category of statement (general) and the relative priority of the statement (specific).

3. The five point likert-type scales employed in this study, together with the use of measures of central tendency, tended to cluster the needs into a narrow range. In order to minimize this problem, the investigator reduced the complexity of the instrument by using only one type of scale for both health educators and their administrators and for priorizing the importance of the competence statements for both health education activities and in-service training needs.

4. This assessment relied on health educators' and administrators' perceptions about the current status of their education needs. The investigator recognized, however, that this sometimes only reflects the perceived (not actual) situation since individuals may lack accurate and complete knowledge about the status of many areas that they are being asked to pass judgement on. To minimize this limitation, the respondents were selected, in a manner that ensured the inclusion of individuals from several areas and at several levels of professional performance.

The instrument was grouped into five categories: (A) communicating health and health education needs, concerns, and resources; (B) determining the proper focus of health education; (C) planning health education in response to identified needs; (D) implementing planned health education programs; and (E) evaluating health education programs.

The content validity approach was employed in this study to validate the instrument. This process involved utilizing the experience of a panel of experts to obtain a professional appraisal of the representativeness of the

instrument with respect to the content area it is designed to measure. The jury of "experts" who validated the instrument for this study met the following criteria:

1. Five or more years of involvement in the field of health education.
2. Knowledge of the duties performed by health educators.
3. Professional background in education.

These individuals were instructed to review the instrument for clarity of statement, consistency of statement with the purpose of the study, ease of response, required time for completion, and other suggestions.

To collect the data, health educators and administrators were asked to rate each of the 29 items on the instrument on a five-point Likert type scale in two ways:

1. Its importance in the performance of health education activities. 2.
2. Its importance as a need for in-service training for health educators.

They were further instructed to differentiate between high and low importance of need (a need was defined as an important difference between "what is" and "what ought to be").

The 29 competence statements from part one of the instrument were analyzed descriptively as follows:

1. An average response for all the respondents was calculated and recorded for each item for its importance in the performance of health education activities.
2. This calculation was repeated for each item for its importance for in-service training needed by health educators and their administrators. A

second rank-ordered list of competence statements indicating the relative priorities of the items for in-service training needs as perceived by both health educators and their administrators was developed.

3. The 29 competence statements were grouped into categories and the analysis was repeated for all respondents and for all categories and also for their relative importance for both the performance of health education and for in-service training.

4. The 29 items were analyzed to develop a comparative analysis of the ranked priorities of all the items for their relative importance for both in-service training needs and the performance of health education in terms of the experience of health educators and administrators, and their practice settings.

The data from the second part of the questionnaire were analyzed by developing a profile of all respondents for the 13 attributes on the instrument, for example, levels of education, experience with health education, title of current position and so on. The number and percent of response to each of these attributes were calculated and recorded in several tables.

MAJOR FINDINGS

The total possible return for this study was 51. Thirty-eight usable questionnaires were returned for a response rate of 75%. Seventy-one percent of all the respondents were classified as health educators and 29% were classified as administrators.

Fifty percent of the respondents had 1-10 years of experience in the field of health education and 50% had 11 or more years of experience. Eighty-six percent of the individuals surveyed had Bachelor's degrees or higher as their level of education, but their fields of specialization varied from community/public health education (31.6%), patient/health care education (21.1%), combined school and community health education (26.2%), health, physical education and recreation (10.6%) and other areas such as social policy, administration, home economics and education, nutrition, psychology and dietectics (10.5%).

Fifty percent of health educators and administrators perceived their work to be primarily administrative and the other 50% perceived their work as both administrative and direct service delivery. Eighty-two percent of those surveyed belonged to one or more professional organizations and 63% subscribed to 3 or more professional journals.

Ninety percent of health educators and administrators felt that in-service training programs were "very much necessary" to keep up-to-date in their areas, and 81.6% indicated that they would "most certainly" participate in such programs if they were available and relevant to their needs.

All the 29 items on the questionnaire were perceived to be important (i.e. mean score of 3.0 or higher) by health educators for the performance of health education activities. Administrators perceived 25 of the 29 items important to health educators for the performance of health education activities (see Appendix B). The use of public speaking skills to present health information were more important to health educators than to

administrators, while the ability to interprete the results of program evaluation were more important to administrators than health educators.

Four of the six highest ranking statements were common to both health educators and administrators, indicating an apparent agreement between health educators and administrators on the relative importance of these competencies (Table 1).

Health educators, as a group, perceived 27 of the 29 statements important for their in-service training needs while administrators, as a group, considered 19 of the 29 items to be important for the in-service training needs of health educators (Appendix C).

The administrators perceived more need for in-service training of health educaors in the areas of management and evaluation of health education programs (i.e. monitoring health education programs; creating opportunity for voluntary participation; and interpreting the results of program evaluation). Health educators, on the other hand, perceived more need for in-service training in the areas of communication and implementation of health education programs (i.e. predicting the outcomes of health education strategies on behavior; securing the cooperation of those affecting and affected by the program; and describing programs to health education professionals, decision-makers, consumers, and the public) see Table 2. None of the six highest ranking competencies for in-service training needs was common for both health educators and administrators.

To determine the extent to which the perceived importance of the competence statements differed between health educators and administrators in terms of their work settings, their levels of experience,

and the categories of the competence statements, the following classifications were employed in the investigation:

1. Three work settings, that is, community organization setting, Government setting, and academic setting.

2. Three levels of experience, that is, 1-5 years, 6-10 years, and 11 or more years.

3. Five categories, that is, communicating health and health education needs, concerns, and resources; determining the proper focus of health education; planning health education in response to identified needs; implementing planned health education programs; and evaluating health education programs.

Community setting

Health educators and administrators practising in the community organization setting perceived all the 29 competence statements to be important to health educators for the performance of health education activities. The use of public speaking skills to present health and health information was of highest importance to both health educators and administrators. Two other competence statements - the ability to train personnel to carry out programs as needed, and the ability to monitor programs to assure that it is being implemented as designed or modified - were common to both health educators and administrators among the highest ranking competence statements (see Table 3).

In terms of the in-service training needs of health educators, health educators perceived 28 of the 29 items to be important, while

administrators in the same setting perceived 25 of the 29 statements to be important for the in-service training needs of health educators.

Health educators perceived the ability to predict outcomes of alternative health education strategies on behavior; the ability to articulate the viewpoints of others; and the ability to train personnel to carry out programs as needed to be of highest importance for in-service needed by health educators in this setting. Administrators in community organization setting perceived three competence statements to be of highest importance for in-service training needed by health educators: (1) the ability to create opportunity for voluntary participation in health education activities; (2) the ability to formulate measurable educational objectives; and (3) the ability to participate in specification of instruments for data collection (see Table 4).

Government setting

Health educators and administrators in the Government setting perceived all the 29 items on the questionnaire important (i.e. mean score of 3.0 or higher) for the performance of health education activities. Health educators perceived the "ability to describe programs to health education professionals, decision-makers, consumers and public" to be the most important competence for the performance health education activities. Three of the six highest ranking competence statements were common to both health educators and administrators (items #9, #4, and #15 in Table 5)

However, for in-service training needs, health educators in the government setting perceived 22 of the 29 statements important, while

administrators in the same setting perceived only 16 of the 29 statements important for in-service training needs of health educators. Health educators perceived two competence statements to be of highest importance: (1) the ability to participate in health policy planning; and (2) the ability to secure cooperation of those affecting and affected by the program. Administrators in the government setting perceive the "ability to analyze political processes related to health and health education" to be of the highest importance for in-service training needs of health educators (Table 6).

Five of the eight highest ranking competence statements for in-service training needs were common to both health educators and administrators practising in the government setting, that is, items #11, #14, #13, #4, and #12 (See Table 6).

Academic setting

Health educators in the academic setting rated all the 29 competence statements important for the performance of health education activities (i.e. a mean score of 3.0 or higher), but rated only 22 of the 29 items important for their in-service training needs. The "ability to predict outcomes of alternative health education strategies on behavior" was rated first as an in-service training need of health educators, but this competence was not even among the 18 highest ranking statements for importance in performing health education activities (see Table 8).

1-5 years of experience

Health educators with 1-5 years of experience rated all the 29 competencies important for the performance of health education activities. Administrators with the same level of experience rated 27 of the 29 statements important for the performance of health education activities.

Both health educators and administrators rated the "ability to describe programs to health professionals, decision-makers, consumers and the public" first for the performance of health education activities. Three other competencies were common to health educators and administrators among the highest ranking statements (see Table 9).

Health educators with 1-5 years of experience rated 22 of the 29 items important for in-service training needs. Administrators with the same level of experience rated 23 of the 29 competencies important for in-service training needed by health educators.

Health educators perceived "the ability to describe programs to health professionals, decision-makers, consumers, and the public" as the most important for in-service training. Administrators perceived "the ability to predict outcomes of alternative health education strategies on behavior" and "the ability to analyse political processes related to health and health education" as the most important competencies for health educator in-service training needs. Two of these highest ranking competencies were common to both health educators and administrators (items #25 and #4). See Table 10

6-10 years of experience

Health educators with 6-10 years of experience perceived all the the 29 items important for the performance of health education activities. Administrators with the same level of experience rated 28 of the 29 statements as important to health educators. Only one competence was common to both health educators and administrators, that is, the ability to predict outcomes of alternative health education strategies on behavior (Table 11).

Health educators perceived 26 of the 29 competencies important for in-service training needed by them. Administrators perceived only 20 of 29 competencies important for health educator's in-service training needs.

Health educators perceive "the ability to participate in health policy planning" as the most important competence for in-service training needs of health educators. Administrators perceived the "ability to articulate the viewpoints of others" as the highest ranking competence for in-service training needed by health educators.

Four of the seven highest ranking competencies were common among the highest ranking statements to both health educators and administrators with 6-10 years of experience (Table 12).

11 or more years of experience

Health educators and administrators with 11 or more years of experience perceived all the 29 competencies as important for the performance of health education activities.

Health educators perceived the ability to: (1) use group process skills

to provide information; (2) use public speaking skills to present health and health information; and (3) monitor programs to ensure that it is implemented as designed or modified to be of highest importance for the performance of health education activities. Administrators perceived the ability to use public speaking skills and the ability to interprete results of program evaluation as the highest ranking competencies for the performance of health education activities (Table 13).

For in-service training needs of health educators, the administrators percieved only 14 of the 29 statements as important (i.e. a mean score of 3.0 or higher) for in-service training needed by health educators. Health educators perceived 27 of the 29 statements as important for their in-service training needs.

Health educators perceived the "ability to predict outcomes of alternative health education strategies on behavior" as being of highest importance for in-service training. Administrators perceived four competence statements (equally) to be of highest importance for health educator in-service training needs (see Table 14). Four of the seven highest ranking statements were common to both health educators and administrators (i.e. items #8, #26, #24, and #18).

Category of statements

All categories (that is, A: communicating health and health education needs, concerns, and resources; B: determining the proper focus of health education; C: planning health education in response to identified needs; D: implementing planned health education programs; and E: evaluating health

education programs) received a mean score of 3.0 or higher by both health educators and administrators for both the performance of health education activities and for in-service training needs of health educators. Administrators, as a group, rated all categories higher for health education activities than health educators, while health educators, as a group, rated all categories (except Evaluation category) higher than administrators for in-service training needed by health educators.

CONCLUSIONS

In considering the procedures used and the results of this study, the following conclusions are warranted:

What are the needed competencies of health educators in Manitoba for the performance of health education activities as perceived by the health educators and administrators in charge of employing health educators?

What is the relative importance of these competencies?

1. Twenty-nine competence statements have been identified and perceived as important by health educators and administrators in Manitoba for the performance of health education activities. These competence statements were drawn from the areas of communication, needs assessment, planninig, implementation, and evaluation. The relative priority of these competencies was also established by health educators and administrators (see Appendix B).

2. There are no major differences between the perceptions of health educators and the perceptions of administrators regarding the

competencies needed by health educators to perform health education activities. In terms of priority of importance, the "ability to use of public speaking skills to present health and health information" is the highest priority in the opinion of health educators, while the "ability to interprete results of program evaluation" is the highest priority in the opinion of administrators.

3. It can be concluded that the job of health educators, while complex and unique in many ways, can be described in terms of competencies considered important for their job.

What are the needed competencies of health educators in Manitoba for in-service training programs as perceived by health educators and administrators in charge of employing health educators? What is the relative importance of these competencies?.

1. Twenty-seven and 19 competence statements were perceived to be important by health educators and administrators respectively for the in-service training needs of health educators (see Appendix C).

There was a slight difference between the perceptions of health educators and the perceptions of administrators regarding the competencies considered to be important for in-service training needs of health educators. The administrators perceived more need for in-service training of health educaors in the areas of management and evaluation of health education programs (i.e. monitoring health education programs; creating opportunity for voluntary participation; and interpreting the results of program evaluation).

2. Health educators, on the other hand, perceived more need for in-service training in the areas of communication and implementation of health education programs (i.e. predicting the outcomes of health education strategies on behavior; securing the cooperation of those affecting and affected by the program; and describing programs to health education professionals, decision-makers, consumers, and the public).

3. Several competence statements were not given a vote of confidence by administrators for the inservice training needed by health educators.

4. It can be concluded that in order to perform their roles adequately, health educators need more in-service training in the areas of communicating information and determining areas of focus for health education while administrators suggested a need for more in-service training in the categories of evaluation and planning. This was evidenced by the relative high values placed on these categories for their importance for in-service training needs.

<u>To what extent do these priorized competencies differ between health educators and their employers, and in terms of their practice setting</u>?

1. The perceptions of health educators and administrators in different settings were similar regarding the importance of the statements for health education activities, but these perceptions differed on the importance of the statements for in-service training needs of health educators.

2. Health educators in the community setting perceived more competence statements (28 of 29) to be important for the in-service

training needs of health educators than administrators in the community setting (25 of 29).

3. Health educators in the Government setting perceived more competence statements (22 of 29) to be important for the in-service training needs of health educators than administrators in the government setting (16 of 29).

4. Health educators in the academic setting perceived 27 of the 29 competencies important for in-service training needs of health educators.

5. Health educators in the community setting perceived the "ability to predict outcomes of alternative health education strategies on behavior"; the "ability to articulate the viewpoints of others"; and "the ability to train personnel to carry out programs as needed" to be of highest importance for in-service needed by health educators. Administrators in community organization setting perceive three competence statements to be of highest importance for in-service training needed by health educators, that is, the ability to: (1) create opportunity for voluntary participation in health education activities; (2) formulate measurable educational objectives; and (3) paricipate in specification of instrument for data collection.

6. Health educators in the government perceived two competence statements to be of highest importance for in-service training needs of health educators: (1) the ability to participate in health policy planning; and (2) the ability to secure cooperation of those affecting and affected by the program. Administrators in the government setting perceived the "ability to analyze political processes related to health and health education" to be of the highest importance for in-service training needs of health educators.

7. Health educators in the academic setting perceived the "ability to predict outcomes of alternative health education strategies on behavior" to be of highest importance as an in-service training need of health educators.

To what extent do these priorized competencies differ between health educators and their employers, and in terms of their levels of experience?

1. There was a difference between the perceptions of health educators and their administrators regarding their levels of experince. It appears that as health educators gain more experience their perceptions of the values of various competencies for in-service training needs seem to alter, some of the competencies that were initially thought to be of limited value later acquire greater value. For example, health educators with 1-5 years of experience perceived 22 of the 29 items important for in-service training needs; health educators with 6-10 years of experience perceived 26 of the 29 items important for in-service training needs; and health educators with 11 or more years of experience perceived 27 of the 29 items important for in-service training needs.

2. Health educators with 1-5 years of experience perceived "the ability to describe programs to health professionals, decision-makers, consumers, and the public" as the most important for in-service training. Administrators with 1-5 years of experience perceived "the ability to predict outcomes of alternative health education strategies on behavior" and "the ability to analyse political processes related to health and health

education" as the most important competencies for health educator in-service training needs.

3. Health educators with 6-10 years of experience perceived "the ability to describe programs to health professionals, decision-makers, consumers, and the public" to be most important for in-service training needs of health educators , while administrators with the same level of experience perceived the "ability to use of public speaking skills to present health and health information" and the "ability to articulate the viewpoints of others" to be of most importance for in-service training needs of health educators.

4. Health educators with 11 or more years ofexperience perceived "the ability to predict outcomes of alternative health education strategies on behavior" to be of most importance for in-service training needs of health educators, while administrators with the same level of experience perceived four competence statements (equally) to be of highest importance for health educator in-service training needs (see Table 14).

To what extent do these priorized competencies differ between health educators and their employers, and in terms of the category of competence statement?

1. Both health educators and administrators agreed that all the five categories are important to health educators for the performance of health education activities and as a need for in-service training. However, the mean scores of each category differed between health educators and administrators.

2. Administrators in the government setting perceived 2 of the 5

categories important for in-service training needs of health educators.

The literature review and the content validity approach employed in this study contributed significantly to the identification and compilation of a list of 29 competence statements perceived to be important to health educators for the performance of their jobs.

These competence statements, if used correctly in the develoment of training and continuing education programs, can help health educators keep their knowledge and skills up to date, revise them, add to them, and supplement them with new ideas.

A profile of the health educators and administrators in Manitoba indicates a variety of backgrounds, trainings, and occupational specialities.

1. Experience levels of respondents ranged from less than 5 years to 37 years. Levels of education ranged from Grade X11 to Ph.D with 86% having baccalaurate or higher degrees.

2. Primary functions of health educators in Manitoba are split evenly between administrative and/or direct service delivery.

3. Areas of specialization included, but not limited to, community/public health education; patient/health care education; health, physical, and recreation; social policy; administration; home economics; nutrition; psychology; dietectics; and education. This diversity of professional specialization presents a particualr challenge. For example, any professional development (in-service training) programs directed at health educators to reduce or eliminate any deficiencies that may exist,

must consider the fields of specialization, the levels of education and the levels of experience of health educators.

4. Ninety percent of health educators and administrators felt that in-service training programs were "very much necessary" to keep up-to-date in their areas, and 81.6% indicated that they would "most certainly" participate in such programs if they were available and relevant to their needs.

To summarize these conclusions, the follwing points are noted:

1. While some differences were reported among the highest ranking competence statements between the perceptions of health educators and administrators regarding the importance of these statements for health education activities and in-service training needs, a majority of the respondents indicated that their preferred competencies were represented in the questionnaire. No new competencies were added to the list.

2. The challenges for health educators appear to be in the areas of effective health communications and behavior change models. Health educators must possess skills in health communication as evidenced by the high importance attached to communication skills as a need for in-service training by health educators.

3. The problem of limited knowledge of the competencies currently needed by practising health educators and the relative importance of the competencies has been addressed by the findings of this investigation.

4. The problem of limited knowledge of the perceived in-service training needs of health educators and the relative importance of the competencies has been addressed by the results of this study.

Recommendations

Within the limits of the generalizability of this study, the following recommendations (based upon the procedures, findings, conclusions, and the experience of the investigator in this study) are respectfully submitted, for the consideration of faculties, departments, or agencies involved in designing health education programs in Manitoba. These recommendations also are suggested as a guide to other researchers, curriculum developers and program planners:

1. The findings of this study should be incorporated in the assessment or re-assessment of the graduate, undergraduate, and continuing education curricula in health education in Manitoba.

This recommendation implies that these findings be utilized in the development of curriculum resource document to guide the basic academic preparation in health education. This will ensure that the most pressing content areas are addressed first, allowing human resources to be used more efficiently.

2. The findings of this study should be utilized as a basis for designing in-service training programs that reflect the true needs of health educators for whom they are intended.

This recommendation is based upon the apparent overall agreement that exists between health educators and administrators on the relative importance of several competencies for in-service training needs, and on the fact that 90% of the respondents expressed strong willingness to participate in in-service training programs if such programs are available and related to their jobs.

3. A single cohesive professional association should be established to identify, register, and represent all health educators in Manitoba, and to provide a unified voice as a means of advancing health education in the province.

This recommendation is based on the fact that 53% of the respondents in the study expressed willingness to join a representative association, and 32% would join if the purpose of the association is clarified. This recommendation, if implemented, can help to: (1) establish career patterns among health educators in Manitoba; (2) predict pre-service and in-service needs of health educators; (3) provide important feedback to professional preparation programs in Manitoba; (4) estimate trends within the health education field by identifying current and future personnel needs; and (5) make useful comparasons between the characteristics of health education professionals and members of other professions.

4. That some kind of a resource centre (clearing house) be established to coordinate and interact with various disciplines employing health educators, such as schools, colleges, public health departments, industries, and all other employers of health educators.

The functions of this "clearing house" might include to: (1) identify all institutions of higher learning with quality programs in the preparation of health educators with the view toward providing these institutions with monetary grants to conduct in-service programs or workshops for health educators practising in their immediate surroundings; (2) indicate the specific competencies the prospective or potential employing agencies should look for in hiring a health educator; (3) act as a resource focus for

community health education activities, working with schools, agencies, and the public health departments in the implementation of programs, and serving as a channel for information dissemination and funding; (4) share these resources and opportunities widely in Manitoba with practising health educators and their program supervisors; and (5) develop a training grant program to encourage future researchers to undertake more studies in the health area.

5. There should be a stronger working relationship and coordination between the training institutions and the community organizations in Manitoba in terms of understanding the advances in the field of health education and better use of the available resources.

This improved understanding can lead to better use of the community resources for learning and professional development. This can extend to giving students preparing for community health education a chance to cooperatively practice within the community settings.

6. Further studies delineating many of the areas addressed in this investigation should be undertaken periodically in Manitoba to assure the identification of the needs and expectations of health educators in continuing professional developments.

Similar studies in this area can help to:

1. Update and revise the competencies identified in this study.
2. Ensure the development of a more comprehensive and up-to-date listing of competence statements.
3. Determine a process for identifying and documenting valid measured objectives.

4. Provide a realistic, empirical basis for the selection of programs and resources.

5. Provide measurable criteria for evaluation of educational programs, projects, and services.

6. Lead to an efficient professional development process.

The following points made earlier in this report further support this recommendation:

1. A needs assessment is never complete. It must be a continuing affair, and changes in needs can be expected. In health education, perhaps more than other areas, this point is more acute because the duties and functions of health educators are transitory, they change with only brief duration.

2. A needs assessment implies the documentation of a measurable difference between the current and the desired state of affairs. This means that a discrepancy analysis for health education goes beyond just guessing either what their needs are or what they should be, it requires hard empirical data.

3. A needs assessment is not a solution. That the education needs of health educators in Manitoba has been determined does not pre-conceive solutions to these problems. Indeed, pre-conceived solutions must be left out of statements of discrepancies, or they bias the outcome and restrict creative ways to solve a problem.

4. In setting priorities of need, it must be considered in terms of what it costs to meet the need against what it costs to ignore it. In health education the cost of ignoring an identified education need may by far outweigh what it costs to meet the need.

5. Instrument selected for a needs assessment must not apportion blame on any group. The more neutral the instrument is, the more the respondents (partners of educational endeavor) are willing to respond to it.

Suggestions for future research

In the present study, health educators in Manitoba were asked to priorize competence statements generated from the literature. In future studies or replications of this investigation, the researcher suggests that health educators be given the opportunity to generate their own competence statements and then to priorize them.

To accomplish this suggestion, the investigator recommends the use of the Delphi technique. This technique is a desirable methodology for forecasting training and development needs because it uses a series of rounds to generate needs statements and then gain consensus among the respondents on the priority of the needs. Other stengths of the Delphi technique are as follows:

1. The technique can be valuable for obtaining responses from health educators who are geographically isolated.
2. The generated statements in writing can produce a high quality of ideas.
3. The anonymity and isolation of respondents can provide freedom from comformity pressures.

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APPENDIX A

PROFILE OF RESPONDENTS

ATTRIBUTES	NUMBER (N=38)	PERCENTAGE (%)
1. Title		
Healtheducator	12	31.6
Director	9	23.7
Coordinator	8	21.1
Consultant	6	15.8
Other	3	7.9
		100*
2. Experienceoncurrentposition		
Less than one year	7	18.4
1-3 years	12	31.5
4-6 years	11	28.9
7-9 years	3	7.9
10 years or more	5	13.3
		100*
3. Experincewithhealtheducation		
1-5 years	10	26.2
6-10 years	9	23.7
11-15 years	13	34.2
16-20 years	1	2.6
21 years or more	5	13.3
		100*
4. Levelofeducation		
Grade X11 or equivalent	3	7.9
Bachelordegree	20	52.6
Master's degree	12	31.5
Ph. D. or equivalent	1	2.6
Other	2	5.4
		100*
5. Majorfieldofspecialization		
Schoolhealtheducation	1	2.6
Community/Publicheeltheducation	12	31.6
Patient/healthcareeducationortraining	8	21.1
CombinedSch.&Comm.healtheducation	10	26.2
Health,physicaleducation& creation	4	10.6
Other	3	7.9
		100*
		100*

ATTRIBUTES	NUMBER	PERCENTAGE
6. Description of present work		
Primarily administrative	7	18.4
Direct health education/serv. delivery	12	31.6
Both admin. & direct serv. delivery	19	50.0
Primarily research	0	0.0
7. Affiliation with professional organization		
None	7	18.4
1-2	13	34.2
3-4	14	36.8
5 or more	4	10.6
other	0	0.0
		100
8. Membership in heel the education association		
Yes	17	44.7
No	21	55.3
Other	0	0.0
		100
9. Relative worth of professional organizations in your day to day work		
Very high	2	5.4
Moderate	14	36.8
Low	16	42.1
Not important	6	15.7
		100
10. Subscription to professional journals		
None	6	15.7
1-2	8	21.1
3--4	17	44.8
5 or more	7	18.4
		100
11. Interest in joining one representative professional association		
Yes	20	52.7
No	6	15.7
Not sure	12	31.6
		100

12. Necessity of in-service training		
Very much so	17	44.7
Yes	17	44.7
Not really	4	10.6
No	0	0.0
		100
13. Willingness to participate in in-service training programs		
Most certainly	31	81.6
Not at all	1	2.6
Only if I have to	1	2.6
Other	5	13.2
		100

*Percentages may not equal 100% due to rounding off

APPENDIX B

Overall priority needs for the performance of health education activities as preceived by health educators and administrators.

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
1	4.370	3) Use public speaking skills to present health and health information	1	4.909	27) Interprete results of program evaluation
1	4.330	9) Describe programs to health education professionals, decission-makers, consumers and the public	2	4.727	3) Use public speaking skills to present health and health information
2	4.296	4) Predict outcomes of alternative health education on behavior	2	4.727	15) Identify potential facilitators and barriers to the specific program
3	4.185	14) Identify social, cultural, enviromental organizational, and growth and development factors that affect health behavior, needs, and interests	3	4.545	4) Predict outcomes of alternative health education on behavior
4	4.148	19) Formulate measurable educational objectives	3	4.545	9) Describe programs to health education professionals, decission-makers, consumers and the public
4	4.148	26) Secure the cooperation of those affecting and affected by the program	4	4.455	19) Formulate measurable educational objectives
5	4.074	15) Identify potential facilitators and barriers to the specific program	5	4.364	16) Secure administrative support for the program
5	4.074	29) Promote integration of health education programs with other facets of organizational activities	5	4.364	24) Monitor the program to assure that it is being implemented as designed or modified
6	4.000	2) Use group process skills to provide information	5	4.364	26) Secure the cooperation of those affecting and affected by the program
			5	4.364	29) Promote integration of health education programs with other facets of organizational activities

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
6	4.000	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question	6	4.273	1) Use mass media to provide health information
6	4.000	24) Monitor the program to assure that it is being implemented as designed or modified	6	4.273	2) Use group process skills to provide information
7	3.963	11) Participate in health policy planning	6	4.273	8) Create opportunity for voluntary participation in health education activities
8	3.926	10) Use persuasive strategies applicable to a given situation	6	4.273	12) Analyze political processes related to health and health education
8	3.926	16) Secure administrative support for the program	6	4.273	28) Report the processes and results of evauation to those interested
8	3.926	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program	7	4.182	11) Participate in health policy planning
8	3.926	23) Prepare educational materials as needed	7	4.182	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
8	3.926	27) Interprete results of program evaluation	7	4.182	22) Train personnel to carry out programs as needed
8	3.926	28) Report the processes and results of evauation to those interested	7	4.182	25) Participate in specification of instruments for data collection
9	3.852	13) Gather data about health-related behaviors, needs, and interests	8	4.000	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question
9	3.852	22) Train personnel to carry out programs as needed	8	4.000	10) Use persuasive strategies applicable to a given situation
10	3.778	1) Use mass media to provide health information			

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
10	3.778	6) Articulate the viewpoints of others	8	4.000	23) Prepare educational materials as needed
11	3.741	20) Formulate alternative educational methods	9	3.909	6) Articulate the viewpoints of others
12	3.704	21) Determine a sequence for educational experiences	9	3.909	13) Gather data about health-related behaviors, needs, and interests
13	3.667	25) Participate in specification of instruments for data collection	10	3.636	14) Identify social, cultural, enviromental organizational, and growth and development factors that affect health behavior, needs, and interests
14	3.630	8) Create opportunity for voluntary participation in health education activities			
15	3.519	5) Articulate the purpose, theory, concepts, and processes of health education	11	3.545	5) Articulate the purpose, theory, concepts, and processes of health education
16	3.481	12) Analyze political processes related to health and health education	12	3.455	20) Formulate alternative educational methods
16	3.481	17) Identify specific behaviors affecting program concerns	12	3.455	21) Determine a sequence for educational experiences
			13	3.182	17) Identify specific behaviors affecting program concerns

APPENDIX C

Overall priority needs for In-service training programs as perceived by Health educators and administrators.

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
1	3.704	4) Predict outcomes of alternative health education on behavior	1	3.818	24) Monitor the program to assure that it is being implemented as designed or modified
1	3.704	26) Secure the cooperation of those affecting and affected by the program	2	3.727	8) Create opportunity for voluntary participation in health education activities
2	3.667	9) Describe programs to health education professionals, decission-makers, consumers and the public	2	3.727	27) Interprete results of program evaluation
			3	3.636	15) Identify potential facilitators and barriers to the specific program
3	3.630	11) Participate in health policy planning			
4	3.593	16) Secure administrative support for the program	3	3.636	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program
5	3.519	14) Identify social, cultural, enviromental organizational, and growth and development factors that affect health behavior, needs, and interests	3	3.636	25) Participate in specification of instruments for data collection
			4	3.545	4) Predict outcomes of alternative health education on behavior
6	3.444	6) Articulate the viewpoints of others			
6	3.444	24) Monitor the program to assure that it is being implemented as designed or modified	4	3.545	26) Secure the cooperation of those affecting and affected by the program
			5	3.455	6) Articulate the viewpoints of others
7	3.407	15) Identify potential facilitators and barriers to the specific program	5	3.455	9) Describe programs to health education professionals, decission-makers, consumers and the public
7	3.407	27) Interprete results of program evaluation			
7	3.407	29) Promote integration of health education programs with other facets of organizational	5	3.455	19) Formulate measurable educational objectives

Rank	Mean	Health Educator (N=27)	Rank	Mean	Administrators (N=11)
8	3.333	22) Train personnel to carry out programs as needed	6	3.364	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question
8	3.333	28) Report the processes and results of evauation to those interested	6	3.364	11) Participate in health policy planning
9	3.296	10) Use persuasive strategies applicable to a given situation	6	3.364	13) Gather data about health-related behaviors, needs, and interests
9	3.296	13) Gather data about health-related behaviors, needs, and interests	6	3.364	29) Promote integration of health education programs with other facets of organizational activities
10	3.259	1) Use mass media to provide health information	7	3.273	12) Analyze political processes related to health and health education
10	3.259	18) Analyze the multiple and interrelated factors which affect behaviors relevant to the program	7	3.273	28) Report the processes and results of evauation to those interested
10	3.259	25) Participate in specification of instruments for data collection	8	3.182	14) Identify social, cultural, enviromental organizational, and growth and development factors that affect health behavior, needs, and interests
11	3.222	3) Use public speaking skills to present health and health information			
11	3.222	12) Analyze political processes related to health and health education	9	3.091	5) Articulate the purpose, theory, concepts, and processes of health education
11	3.222	19) Formulate measurable educational objectives	10	2.909	10) Use persuasive strategies applicable to a given situation
12	3.185	20) Formulate alternative educational methods	10	2.909	16) Secure administrative support for the program
12	3.185	2) Use group process skills to provide information			

Rank	Mean	Health Educators (N=27)	Rank	Mean	Administrators (N=11)
13	3.074	21) Determine a sequence for educational experiences	10	2.909	22) Train personnel to carry out programs as needed
14	3.037	5) Articulate the purpose, theory, concepts, and processes of health education	11	2.818	1) Use mass media to provide health information
14	3.037	8) Create opportunity for voluntary participation in health education activities	11	2.818	2) Use group process skills to provide information
15	3.000	7) Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question	12	2.636	23) Prepare educational materials as needed
16	2.963	23) Prepare educational materials as needed	13	2.545	20) Formulate alternative educational methods
17	2.778	17) Identify specific behaviors affecting program concerns	14	2.455	17) Identify specific behaviors affecting program concerns
			15	2.364	3) Use public speaking skills to present health and health information
			15	2.364	21) Determine a sequence for educational experiences

APPENDIX D

ETHICAL APPROVAL OF RESEARCH AND EXPERIMENTAL DEVELOPMENT PROJECTS INVOLVING HUMAN SUBJECTS

This form is to be completed in the light of the Faculty of Education policy on ethical review. This policy requires that Committee members take into account the relevant standards of the discipline concerned as well as, where appropriate, the standards specified by certain external funding bodies.

Project identification

(to be filled in by investigator)

Investigator(s) JOB ELOM NGWE

Title ASSESSMENT OF EDUCATION NEEDS OF HEALTH EDUCATORS IN MANITOBA

This is to certify that the Review Committee has examined the research and experimental development project indicated above and concludes that the research meets the appropriate standards of ethical conduct in research with human subjects.

Date: 3-6-86 Signature of chairperson:

APPENDIX E

A thank-you letter for participating in a research study

Dear

I wish to express my sincere appreciation for your participation in the assessment of the education needs of health educators in Manitoba, a study recently completed at the University of Manitoba.

Your input has certainly resulted in a wealth of information related to the education needs of health educators for the performance of health education activities and for in-service training.

Please find enclosed a summary of the major findings of this study. Copies of the thesis should be available at the University of Manitoba libraries.

Thank you again for your interest and cooperation.

Yours sincerely,

Job Elom Ngwe
(Investigator)

Manitoba

APPENDIX F

Health

Community Services

15 — 1st Avenue, S.W.
Dauphin, Manitoba, CANADA
R7N 1R9

(204) 638-7024

Job Elom Ngwe,
Dept. Maths & Nat. Sciences,
Faculty of Education,
University of Manitoba,
WINNIPEG, Manitoba. R3T 2N2

Dear Mr. Ngwe:

Re: Questionnaire

We are returning your questionnaire uncompleted. Although we have a Health Educator position for Parklands Region, to date we have had no staff person providing this service.

We, however, would be interested in receiving a copy of your study summary as we anticipate this position will be filled some time in the foreseeable future.

Yours truly,

P. Yvonne Hrynkiw,
Regional Director, Parklands Region.

PYH/jm
Enc.

APPENDIX G

A COPY OF THE SURVEY INSTRUMENT

INSTRUCTIONS:
Inside this booklet are competence statements of health education or health promotion needs.These statements were developed from several studies, reports, and published recommendations.

Please, read the competence statement, then rate its importance in two ways:

(1) its importance in the performance health education activities ie how important is the possession of this competence in your job; and

(2) its importance to you personally as a need for further professional development through in-service training ie what degree of in-service training is needed by you

Indicate your rating by circling the appropriate number beside each statement. Be sure to rate **all** statements in the list. A rating of 1 indicates a low priority of need and a rating of 5 indicates a high need.

EXAMPLE

	Importance of Need	
	Health Education	In-service Training
	No Need Great Need	No Need Great Need
	1 2 3 4 5	1 2 3 4 5
The health educator must be able to develop methods by which new ideas can be incorporated into health education.	1 2 3 4 5	1 2 3 4 5

Note:
Even though you may feel all items are important, it is necessary to distinguish between higher and lower priority need*

*A need is an important difference between "what is" and "what ought to be"

PLEASE BE SURE YOU HAVE READ THE PRECEEDING INSTRUCTIONS BEFORE CONTINUING Competence Statement	IMPORTANCE OF NEED FOR: Performance of Health Education No Need 1 2 3 4 5 Great Need In-service Training Needed by you No Need 1 2 3 4 5 Great Need
THE HEALTH EDUCATOR MUST BE ABLE TO:	
1. Use mass media to provide health information. (ie identify steps for preparing materials; describe strengths weaknesses of various media; and identify most appropriate media)	1 2 3 4 5 / 1 2 3 4 5
2. Use group process skills to provide information. (ie use elements of successful group discussion such as active listening; describe various group process tecniques; and distinguish between appropriate techniques	1 2 3 4 5 / 1 2 3 4 5
3. Use public speaking skills to present health information. (this includes identifying oral presentation skills; selecting and organizing presentation; and explaining how media such as overhead projection and film strips can assist presentations)	1 2 3 4 5 / 1 2 3 4 5
4. Predict outcomes of alternative health education strategies on behavior. (ie describe concepts of human behavior; identify educational components of health concerns; and describe probable health education outcomes given the resources available)	1 2 3 4 5 / 1 2 3 4 5
5. Articulate the purpose, theory, concepts, and processes of health education. (ie being able to define health education as a discipline and professional field; identify the purposes of health education; and list various processes such as individual counselling, and classroom instruction)	1 2 3 4 5 / 1 2 3 4 5
6. Articulate the viewpoints of others. (ie translate culture-bound items; assess perceptions of audience; and recognize need for exploration)	1 2 3 4 5 / 1 2 3 4 5
7. Assist persons with differing viewpoints, acting individually or collectively, to understand issues in question. (ie use principles of group dynamics to clarify issues)	1 2 3 4 5 / 1 2 3 4 5

8. Create opportunities for voluntantary participation in health education related activities. (ie showing a relationship between health and behavior; and describing the utility of voluntary participation)	1 2 3 4 5	1 2 3 4 5
9. Describe programs to health education professionals, decision-makers consumers and the public by means of writing, speaking, and other means of communication techniques. (including indicators of program success e.g. cost-benefit, change in behavior etc)	1 2 3 4 5	1 2 3 4 5
10. Use persuasive strategies applicable to a given situation. (ie explain the value of health education to the audience in order to enhance informed decision-making; and predict potential outcomes for proposed activities)	1 2 3 4 5	1 2 3 4 5
11. Participate in health policy planning. (this includes relating health education concepts to health policy planning; illustrating contributions of health education to applications of health policy; and articulating health education's role in policy proposals)	1 2 3 4 5	1 2 3 4 5
12. Analyze political processes related to health and health education. (ie understand how political information is gathered; and match knowledge of political process to a given audience and situation)	1 2 3 4 5	1 2 3 4 5
13. Gather data about health-related behaviors, needs and interests. (ie summarize data expressed in different forms; and identify determinants e.g. social influence related to behavior	1 2 3 4 5	1 2 3 4 5
14. Identify social, cultural, environmental organizational, and growth and development factors that affect health behavior, needs, and interests. (ie describe the social structure of the population to be served e.g. ethnicity, socio-economic status, political makeup)	1 2 3 4 5	1 2 3 4 5
15. Identify potential facilitators and barriers to the specific program (ie recognize procedures which inhibit or support programs; and explain effects of cost of program implementation)	1 2 3 4 5	1 2 3 4 5
16. Secure administrative support for the program. (ie list steps necessary to secure support; outline a budget for proposed program; and describe the expected outcomes of the program)	1 2 3 4 5	1 2 3 4 5
17. Identify specific behaviors affecting program concerns. (ie locate sources of information about health concerns e.g. journals, and reports; and explain determinants of behavior)	1 2 3 4 5	1 2 3 4 5
18. Analyze the multiple and interrelated factors which affect health behaviors relevant to the program. (ie cultural beliefs, misconceptions, and ignorance)	1 2 3 4 5	1 2 3 4 5

19. Formulate measurable educational objectives. (ie list different kinds of objectives; and identify the necessary components of a well written objectives)	1 2 3 4 5	1 2 3 4 5
20. Formulate alternative educational methods. (ie compare various educational methods ; and match theory with specified educational objectives)	1 2 3 4 5	1 2 3 4 5
21. Determine a sequence for educational experiences. (ie describe a sequence of learning opportunities for a given educational situation)	1 2 3 4 5	1 2 3 4 5
22. Train personnel to carry out programs as needed. (ie decribe the process for assessing training needs and implementing training programs)	1 2 3 4 5	1 2 3 4 5
23. Prepare educational materials as needed. (ie describe the process of developing materials; and explain the advantages and disadvantages of self-developed materials e.g. cost)	1 2 3 4 5	1 2 3 4 5
24. Monitor the program to assure that it is being implemented as designed or modified. (ie demonstrate the principles of supervision; describe process of feedback systems; and report barriers and facilitators to program implementation)	1 2 3 4 5	1 2 3 4 5
25. Participate in specification of instruments for data collection (ie identify sources of instruments; and describe advantages and disadvantages of various instruments)	1 2 3 4 5	1 2 3 4 5
26. Secure the cooperation of those affecting and affected by the program. (ie describe how to involve relevant parties in the evaluation process; and explain methods to maintain interest in program evaluation)	1 2 3 4 5	1 2 3 4 5
27. Interpret results of program evaluation. (ie recognize importance of looking for unanticipated result e.g. significant deviations from what was expected	1 2 3 4 5	1 2 3 4 5
28. Report the processes and results of evaluation to those interested. (ie translate evaluation findings into terms understandable by others)	1 2 3 4 5	1 2 3 4 5
29. Promote integration of health education programs with other facets of organizational activities. (ie identify points of entry for health education into other programs e.g. health concepts in psychology)	1 2 3 4 5	1 2 3 4 5

PART TWO: GENERAL DEMOGRAPHIC DATA

INSTRUCTIONS: Please check (✓) the number(s) next to the item(s) that most closely describe(s) your professional identity.

1. Title of my position is

☐ Health Educator ☐ Director ☐ Coordinator ☐ Consultant

☐ Other, please specify_____

2. I have been in my current position for

☐ less than one year ☐ 1-3 years ☐ 4-6 years ☐ 7-9 years ☐ 10 years or more

3. I have been associated with health education for

☐ 1-5 years 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21 years or more

4. My level of education in terms of earned degree is

☐ Grade X11 or equivalent ☐ Bachelor Degree ☐ Masters Degree ☐ Ph.D or equivalent

☐ Other, please specify_____

5. My major field of specialization is

☐ School health education ☐ Community/Public health education ☐ Patient health education

☐ Combined school/community health education ☐ Health care education or training

☐ Health, physical education, and recreation ☐ Other, please specify_____

6. How would you describe your present work

☐ Primarily administrative ☐ Primarily direct health education/service delivery

☐ Both administrative and direct service delivery ☐ Primarily research

☐ Other, please specify _____

7. I am affiliated with

☐ No professional organization ☐ 1-2 professional organizations

☐ 3-4 professional organizations ☐ 5 or more professional organizations

☐ Other, please specify_____

8. Are you a member of any health education associations such as CHEES?

☐ Yes ☐ No ☐ Other, please specify_____

9. The relative worth of professional organizations in managing my day to day operation is

☐ very high ☐ moderate ☐ low ☐ not important

☐ Other, please specify _____

10. I subscribe to the following number of professional journals

☐ None ☐ 1-2 ☐ 3-4 ☐ 5 or more ☐ Other, please specify _____

11. (a) I will be interested in joining one professional association that will represent and speak for all health educators/promoters in the province

☐ Yes ☐ No ☐ Not sure ☐ Other, please specify_____

11. (b) If your answer to Q-11(a) is No or Not sure, Why_____

12. (a) In-service training is necessary to keep abreast with changes in my field

☐ Very much so ☐ Yes ☐ Not really ☐ No

☐ Other, please specify_____

12(b) If you answered No or not really to Q-12(a), Why_____

13. I will be willing to participate in in-service training programs in my area

☐ Most certainly ☐ Not at all ☐ Only if I have to

☐ Other, please specify_____

COMMENTS: