A PROCEDURE

FOR DEVELOPING

AN INTERNALLY-BASED EVALUATION PLAN

FOR

A COLLEGE DIPLOMA NURSING PROGRAM

BY

VIVIAN J. STEVENSON

B.Sc.N., University of Western Ontario, 1968

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS (EDUCATION)

in the Faculty

of

Education

Vivian J. Stevenson 1984

SIMON FRASER UNIVERSITY

November 1984

All rights reserved. This thesis may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

APPROVAL

Vivian Jean Stevenson

Master of Arts (Education)

Name:

Degree:

Title of Thesis:

A Procedure for Developing an Internally-Based Evaluation Plan for a College Diploma Nursing Program

Examining Committee

Chairperson:

R. W. Marx

T. O'Shea Senior Supervisor

M. Wideen Associate Professor

Ż

H. Niskala Associate Professor Nursing ACU University of British Columbia

G. Page Associate Professor Department of Medicine University of British Columbia External Examiner

Date approved 16 Nov, 1984

ii

PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis, project or extended essay (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this work for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this work for financial gain shall not be allowed without my written permission.

Title of Thesis/Project/Extended Essay

Author:

(signature)

(name)

ember 16, 1984

Abstract

The aim of this study was to design an approach to planning a program evaluation for use in devising an internal evaluation of a college-based diploma nursing program. A six-step procedural approach to this task was developed.

Four research questions were posed:

1. Which of the existing conceptual models of program evaluation, developed by educational theorists, is most suitable for use by diploma nursing programs?

2. What are the benefits and limitations of using a conceptual model for program evaluation in nursing education?

3. Can a single approach to educational evaluation encompass the differing goals and roles that program evaluation in nursing education may serve?

4. Would a procedural guide to planning educational evaluation be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program?

The first three questions were answered through a literature review. No one conceptual model appeared adequate as a basis for planning an evaluation. However, it did appear worthwhile to develop a procedural approach which emphasized the methodology of planning a study.

The fourth question involved field testing a proposed procedure with one college-based diploma nursing program. A

iii

committee of eight volunteers from the nursing faculty, with the assistance of the researcher, used the procedure to develop a simulated evaluation plan. They reviewed some information that the researcher had collected pertaining to the program philosophy, intended outcomes, unintended outcomes, important issues affecting the program, and views of critics. The group rank-ordered the most important decisions to be made about their program, determined the purposes of the evaluation, devised one evaluation question, and planned a methodological approach to this question.

The feedback received in the field testing suggested that the proposed procedure was a systematic and structured way by which faculty could plan an internal evaluation. Insights gained about implementing internal evaluations are discussed and recommendations made for further research.

iv

DEDICATED TO:

ARTHUR, CRAIG, & DAYNA

TABLE OF CONTENTS

		Page
Approva.	1	·····.ii
Abstract	t <i>.</i>	······································
Table of	f Conte	ntsvi
List of	Tables	viii
List of	Figure	six
Chapter	I.	INTRODUCTION
Chapter	II.	LITERATURE REVIEW
Chapter	III.	DEVELOPMENT OF A PROCEDURAL APPROACH

		Page
Chapter I	[V.	VALIDATION OF THE REVISED PROCEDURE
Chapter V	,	RESULTS OF FIELD TESTING THE PROCEDURE
Chapter V	/I	CONCLUSIONS AND RECOMMENDATIONS
Appendix	A	Steps in Field Testing the Procedure
Appendix	В	First Draft of the Procedure
Appendix	С	Example of a Program Picture
Appendix	D	A Methodological Approach to an Evaluation Question
Appendix	E	Proposal to the College
Appendix	F	Open-ended Questionnaires (student, faculty, head, nurse)
Appendix	G	Qualitative Data about a Program
Appendix	Н	Reading Materials for the Committee
Appendix	I	Importance and Feasibility Questionnaire-Part 1.186
Appendix	J	Importance and Feasibility Questionnaire-Part 2.192
Appendix	К	Revised Decision-rating Scale & Summary Sheet196

List of Tables

List of Figures

1.	The Revised Procedure	Page
2.	The Original Decision-rating Scale	65
з.	Summary of a Methodological Approach to Evaluation	
	Questions	75

Chapter I

INTRODUCTION

The Criteria, Policies, and Procedures for Approval of diploma nursing programs by the Registered Nurses Association of British Columbia (RNABC) state that "evaluation of the curriculum is to be a systematic process" (June, 1977). How this systematic plan is to be developed is not specified. An analysis of the written curriculum, such as the one required by the RNABC, is seen by many authors as an essential component of program evaluation (Eisner, 1981; Scriven, 1981; Webster, 1981; Worthen, 1981). Evaluation questions would focus on whether the curriculum is worth teaching and whether the learning activities are effective (Eisner, 1981). Webster emphasizes the importance of validating the relevance of the program objectives with various clients (1981, p. 51). Worthen mentions the value of obtaining the "judgments of relevant substantive experts" as one aspect of determining curriculum worth (1981, p. 67). This approach to program evaluation is embedded in most nursing programs by the necessity to undertake periodic review by the professional association. But as the literature reveals, program evaluation should encompass a broader perspective of the educational experience than just an assessment of the written curriculum when judging program worth. The issue is how to approach

this broader perspective in a systematic and logical way.

Lynch (1978) proposes an approach to evaluating nursing programs which emphasizes input-output analysis, that is. the need for explicitness in writing terminal objectives as a basis for collecting data. She also highlights the need to assess curriculum integration, or the logical connections among the concepts stated in the philosophy, the overall objectives, the conceptual framework, the horizontal and vertical strands, the level objectives, the course objectives, the unit objectives, and the learning experiences (pp. 2-3). This approach coincides with the RNABC criteria for curriculum approval. In the National League for Nursing publication, A Judgment of Merit - Evaluation of Programs in Nursing: Applications, descriptions are given of the attempts of the faculty of different nursing programs to achieve systematic program evaluation. These articles, rather than illustrate a common overall approach to evaluation, reveal that because of limited resources certain aspects of the program were selected for in-depth study while others were ignored. The specific areas which were investigated tended to be unique to a given program.

In an external evaluation of the first college-based diploma nursing program in Canada, commissioned by the Registered Nurses Association of Ontario, two basic questions were posed as a general guide to the five year study. These focused on the job performance of the graduates and the practicality of conducting nursing programs in a college setting (Allen & Reidy, 1971). In

reviewing this study, five major steps were identified in the planning approach used by the researchers (pp.4-6). Given the study, which was general focus of the determined by the aponsoring agency, the first step was to define evaluation research in terms which reflected the biases of the researchers. Next, the goals of the program were obtained. A conceptual model of a nursing program, using a systems orientation, was then provided by the researchers to give direction to subsequent data collection. Meetings were held with knowledgeable insiders and outsiders to review information about the program and to identify relevant issues and concerns. The researchers wanted to ensure that the study addressed the major critical view of the program. Five detailed research questions were then outlined. Lastly, the general nature of the evaluation project, as well as the clarity and focus of the questions asked, were validated with various interest groups, that is, the sponsor, the faculty of the program, learned colleagues in the nursing community, and the provincial department of education.

As part of the planning process, major data sources were also identified: students, graduates, nursing faculty, and head nurses in clinical agencies who had direct experience with the students and graduates (pp. 7-8). Data collection methods were then developed for each evaluation question. Also, it was planned that data from the program under study would be compared to those from three other diploma nursing programs not based in colleges.

з

In analyzing the design of this study, it was apparent that the evaluation questions asked determined the direction and scope of the study. Although the general nature of the questions was mandated by the sponsoring agency, the researchers spent time in the planning stages collecting information about the program to ensure that the concerns of the faculty and important critical views of the program would be addressed when specifying the guestions in more detail. In addition to the general framework provided by the evaluation guestions, the researchers provided a conceptual model of a nursing program to give direction to the selection of data sources and data collection methods. The cautionary statement that there was "a need to know a great deal about [the program] before placing value on it" was noted by the researchers (p. 13).

The design of another external evaluation study of three college-based diploma nursing programs in Alberta, was also based on specifically stated evaluation questions (Steed, This independent study focused on two major questions 1974). in the report as reflecting the interests which were noted and values of the researcher, that is, the characteristics of the student who selects a college-based diploma nursing program and graduate performance in the workplace. This was primarily a descriptive study and no effort was made to compare data on an individual program basis (p.66).

The appropriateness of using specifically worded evaluation questions as a basis for an evaluation study was apparent in

reviewing these studies. Another evident factor relevant to planning an evaluation was the use of a conceptual model to describe the program. Also, it was obvious that а particularily important aspect of the approach selected to quide an internal evaluation would be the inclusion of mechanisms to assist faculty in the deliberative selection of the evaluation questions.

Although the literature on educational evaluation describes program evaluation from the perspective of the external evaluator, it is common practice in nursing programs to design and implement evaluation studies internally. Internal evaluation, in terms of predicted success in improving or changing educational programs, may in actuality be preferable to external evaluation. Research on the implementation of educational programs reveals the importance of developing local ownership and involvement of educational personnel when effecting change (Common, 1981; Fullen, 1979; McLaughlin & Berman, 1975; McLaughlin & Marsh, 1978). Minimal internal resistance to program evaluation, as well a of 88 sense ownership for the process, may have a better chance of occurring if the faculty themselves have planned and implemented the evaluation.

The Problem

There is an immediate need to develop a formal, planned, systematic approach to the evaluation of nursing programs in

British Columbia. The systematic evaluation of curricula in all nursing programs in the province must be done in order to be approved by the Registered Nurses Association. In a time when provincial governments are contending with shrinking revenues, all components within the educational system are being called justify the expenditure of tax dollars. upon to One must question if programs are achieving the goals intended, or which programs are more valuable than others. This movement 18 substantiated by such legislation as the "Sunset Clause". section 68, Bill 82 of the College and Provincial Institutes Act, which states that "by March 1982 and by the end of each subsequent five year period [each organization will] report to the Minister of Education, setting out the reasons, if any, why it should continue to exist". As a component of a community college, nursing programs must answer to the demands of this legislation as specified in the Guidelines for the Preparation of College Strategic and Operational Plans (November 1982). In particular, directives are given in this document asking for the specific plans of each college to ensure "quality of courses, programs, and instructional support services".

However, the fiscal restraints that determine the need for systematic program evaluation will, at the same time, impose limits on the resources available. Hiring outside consultants is not a feasible alternative. Most frequently, faculty and administrators are left to their own devices to develop a plan for program evaluation. Very few will have been exposed to the

recent theories and practices of program evaluation. Given that the present situation dictates the necessity for internal program evaluation, a procedure should be established within the institution to produce a valid and credible evaluation of program worth.

Purpose of the Study and Research Questions

The aim of this thesis was to extract from the literature an approach to planning a program evaluation which would be perceived by faculty as important and feasible for use in planning an internal evaluation of their college-based diploma nursing program. A procedural approach to this task was developed, based primarily on the ideas of Cronbach, 1982. Field testing was done with one nursing program and revisions made to the proposal using the feedback which was received.

In this thesis, the following research questions were posed:

1. Which of the existing conceptual models of program evaluation, developed by educational theorists, is most suitable for use by diploma nursing programs?

2. What are the benefits and limitations of using a conceptual model as a basis for program evaluation in nursing education?

3. Can a single approach to educational evaluation encompass the differing goals and roles that program evaluation in nursing education may serve?

4. Would a procedural guide to planning educational evaluation be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program?

Pertinent Developments in Program Evaluation

With the passage of the Elementary and Secondary Education Act of 1965 in the United States Congress, educators were held accountable for the federal monies they received, signifying in that country the first major evaluation mandate to be issued by fund givers. In the early 1970s, five major deficiences were identified by the Phi Delta Kappa Commission on Evaluation as critical to adequately respond to this mandate:

1. lack of adequate evaluation theory

2. lack of specification of the types of evaluation information which are most needed

3. lack of appropriate instruments for organizing, processing, and reporting evaluative information

4. lack of sufficient numbers of well-trained evaluation personnel.

It is in response to these needs that new theories of educational evaluation were developed. These same issues are faced in nursing education today in British Columbia.

The development of a plan for evaluating programs should begin with a definition of the term evaluation. Evaluation is generally accepted to mean a determination of value, or a

judgment of worth. Popham defines systematic educational evaluation as "consisting of the formal assessment of the worth of educational phenomenon" (1975, p. 8). Worthen and Sanders emphasize that educational evaluation is "disciplined inquiry", and argue that "evaluation must include judgments about the worth of the program, product, or process being evaluated" (1973, p. 38). Stufflebeam notes that the entire act nf evaluation should center on the criteria to be evoked in making decisions (cited in Worthen 3 Sanders, 1973, p. 25). Certain commonalities are obvious these definitions: in disciplined, systematic inquiry; criteria or standards; and judgments of worth.

Worthen and Sanders note some major similarities between educational evaluation and educational research. They state that both use systematic inquiry techniques, that is, a primary dependence on empirical techniques and methods (1973, p. 14). They equate evaluation activities most closely with philosophical inquiry because of the emphasis in both on value questions (1973, p. 16).

Worthen and Sanders further emphasize the need to distinguish what educational evaluation is NOT. They assert similarities, educational that although there are some evaluation is not the same as educational research (1973, chap. 2). Popham summarizes these differences under three main

categories: focus, generalizability, and value emphasis. He states that research focuses on conclusions, aims for high generalizability and has a value emphasis on truth, while the evaluation focus is on decisions, with resulting low generalizability, and a value emphasis on worth (1975, pp. 11-15).

Evaluation is also not merely measurement (Popham, 1975, p. 9). Measurement, or the act of determining the degree to which an individual possesses a certain attribute, is however, a component of the evaluative process (Popham, 1975, p. 9). Eisner reinforces the need to make this distinction, explaining that evaluation is a complex appraisal which should draw from a wide knowledge base (1979, p. 98). Because evaluating is valuing, it should focus on those activities, processes, or outcomes believed to be most important in the program.

Worthen and Sanders point out that in most studies evaluators simply observe and describe what is, which they note is a common shortfall. These functions could however be appropriate in an evaluation study, along with others such as contributing to curriculum construction, predicting academic success, and improving courses (1973, p. 24). However, the primary goal, they emphasize, must be "to answer questions of selection, adoption, support, and worth of educational materials and activities" (1973, p. 24). Morris and Taylor Fitz-Gibbon note that people can expect evaluation to perform many different functions. Examples they give are needs assessment, organizational review, description of program implementation,

program documentation, and evaluation of program processes (1978, pp. 11-12).

Scriven puts forth a series of important insights and raises a number of issues regarding educational evaluation in his seminal paper (1973, pp. 60-105). One role of educational evaluation he describes is to assess the merits of the educational goals themselves, and not just the degree to which goals are achieved. This opinion is shared by others (Bricknell, 1981; Popham, 1981). He also states that pure payoff evaluation, for example, students' grades, does not locate the sources of difficulty. Another shortcoming of goal-preoccupation he identifies is the creation of "tunnel-vision", an orientation which might overlook the important unanticipated consequences of He cautions the readers to be aware of both the a program. intended and the unanticipated outcomes of a program.

important distinction between the formative and The summative roles of educational evaluation was first made by Scriven (1973). Formative evaluation refers to assessments of worth which focus on instructional programs currently being taught and therefore, still capable of being changed. Summative evaluation refers to assessments of merit of completed programs. further in relating these formative and Stufflebeam goes summative roles to the decision-making aspect of educational Formative evaluation ia seen 88 proactive evaluation. evaluation and related more to internal decision making, that is, a curricular-process focus. Summative evaluation is termed

retroactive evaluation and equated with accountability to external agencies (cited in Popham, 1975, p. 36).

Scriven recommends that one program be compared against another because the decision focus of educational evaluation typically involves choices among competing alternatives. The test or the criteria used in this comparison, however, must be closely scrutinized. He also points to the use of subject matter experts to judge the worth of both goals and content (1973. pp. 62-64). When comparing two curricula, Popham also recommends framing the inquiry in terms of the available alternatives, then gathering information that permits the merits of these alternatives to be contrasted (1975, p. 15). Eigner. on the other hand, notes that hard comparative data is difficult to achieve, given that different programs aim at different ends, and generalizability varies from one setting to another. He does admit that the effectiveness of different programs can be compared, if only in relation to their stated goals and unanticipated consequences (1979, p. 72).

Krathwohl points out the value of having precisely stated worthwhile objectives in order to provide much, but not all, of the information required to evaluate a program. He provides an excellent summary of different levels of learning objectives for both the cognitive and the affective domains of learning (1973, pp. 246-248). When evaluating learning outcomes related to knowledge and affect, these examples would be very useful in reviewing the clarity of the objectives themselves, and also the

fit among these objectives, the stated goals, and learning activities. These examples could also be used in designing data collection instruments.

Teacher evaluation could also be a component of a program evaluation. Scriven notes that teachers should be accountable for the excellence of instruction (1973, p. 63). Popham states that teachers, considered as representing "instructional treatments", are to be included in the evaluation process (1975, p. 18). Testing teachers for basic content expertise may be part of a new trend, as Mitchell reports in 1979 in his article on the Dallas experiment. The clinical competence of nursing teachers is currently an area of concern and discussion in nursing programs.

Wilhelm (1967) states that evaluation must encompass every objective valued by the school. If the goals of the school include important side effects of learning such as the spirit of inquiry, sensitivity, and moral development, then these too must be evaluated. He also states that the most important outcome of education is what happens within the learner; a different emphasis than Tyler's (1949) "observable behavior" view of learning. The students' evaluation of their own learning, as well as their performance on achievement tests, could be reviewed when measuring outcomes of an educational program.

In nursing education programs, all of these roles of educational evaluation could be appropriate. Valuable data for use in improving the curriculum could be made available.

Information could be provided to groups in the community with a vested interest in the program. This information could indicate the worth, relevancy, and achievements of the program. Also, it could serve the important function of providing recognition and reinforcement to students and faculty for positive accomplishments.

summary, a review of the literature reveals that In educational theorists have varying opinions on the definition of evaluation. Program evaluation can also play many different roles, depending on the needs, expectations, and values of the people involved in a particular program. The process of planning an evaluation study should logically begin with a definition of program evaluation. Because educational programs themselves are complex phenomena, a broad spectrum of information about the program should be reviewed prior to narrowing the scope of the study into manageable units of investigation. Certain authors in the literature note that relevant factors to address could be not just whether the goals and objectives of the program are being met, but also the intrinsic value of these statements unanticipated outcomes themselves. Intended and could be evaluated. Comparing one program against another, or one method of program delivery or instructional technique against another, could also be appropriate to include when designing a study. A critical function in planning a program evaluation would be to review a wide base of information about the program prior to deliberatively selecting the particular focus of the study. The

criteria used to guide the selection process should be both readily apparent and justifiable to others.

Significance of the Study

Mandatory evaluation of all college programs in British Columbia has been legislated by the provincial government. The systematic procedural approach proposed in this thesis presents one way to assist evaluators in specifying the types of evaluation information which are viewed in the literature as ROSL important to program evaluation. It can accomodate differing philosophical views toward education and evaluation, and it can provide a system for organizing, processing, and reporting evaluative information. Because the evaluation procedure is internally based, it facilitates the skill development of faculty in program evaluation. It therefore addresses the concerns noted by the Phi Delta Kappa Commission as critical in responding to a legislated evaluation mandate. Although the procedure is applied to diploma nursing programs, the major theoretical basis is derived from general education Therefore, there exists the possibility of theory. adapting the procedure for more general usage in other non-nursing college programs.

Historically, the major thrust in the evaluation of all diploma nursing programs in the province has been toward meeting the demands of an external evaluation established by the RNABC. However, both this approach to program approval and the criteria used are currently under review by the Association. There is the possibility of incorporating a self-evaluation component to the approvals process. This would emphasize the value of having a set procedure to guide a systematic internal evaluation of the program.

Limitations of the Study

The first three research questions were answered by an analysis of the literature on program evaluation. As a result of this analysis, it was decided to develop a procedural approach to developing a plan for an internal evaluation of a college-based diploma nursing program. A preliminary study was done by the researcher with a faculty group at the college where she is employed. As chairperson of the Program Evaluation and Research Committee of the Nursing Department within the college at that time, the researcher proposed to the committee a procedural approach to developing an evaluation plan for their nursing program. As a result of this preliminary field testing, the procedure was modified and further developed. That revised procedure was then formally tested for perceived importance and feasibility within the same nursing department.

The sample of nursing faculty used in both the preliminary and the second field testing of the proposed approach to planning evaluations was selected from one college-based diploma nursing program in British Columbia. It was not claimed that the sample was representative of all seven college-based nursing

programs in the province. However, these nursing programs do share many commonalities in the structure and organization of their curricula because of the mandatory approval process of the provincial Registered Nurses Association. Also, the influence of the Ministry of Education regarding program evaluation in all college programs throughout the province is the same.

It was felt that the most valuable data on the appropriateness of the proposed procedure, from a practical point of view, would be gained by having one faculty group work through the application of this procedure to their actual program. Subsequent field testing in other reality settings, although necessary, was considered to be beyond the scope of this thesis.

Given the complexity and the time involved in the task of designing an evaluation plan for a two year nursing program, it was decided to focus the second field testing of this thesis on only a portion of the proposed procedure. Through the formation of a simulated Program Evaluation Steering Committee, a group of nursing faculty, with the assistance of the researcher, worked through in totality the first three stages of the procedure. For the remaining three stages of the procedure, only one evaluation question was selected as a prototype example and developed to illustrate how these steps would be applied. The field testing of the entire procedure to develop a comprehensive evaluation plan should be the object of a subsequent study.

This procedure proposes one way to approach planning evaluations of nursing programs. Because of the subjectivity inherent in any evaluation process, other ways of developing plans would certainly be possible. Cronbach notes that "there is no single best plan for an evaluation, not even with a given program, at a given point in time, with a particular budget" (1982, p. 321).

Outline of the Study

There were three main research activities involved in developing this thesis: a review of the literature on program evaluation, the subsequent development of a procedural approach to planning internal evaluations based on this review, and lastly, the systematic field testing of the proposed procedure in a reality setting. The first three research questions posed by this thesis were answered by reviewing existing theoretical approaches to program evaluation. Discussions regarding these questions and the conclusions made by the researcher are presented in chapter two of the thesis.

Chapter three outlines the development of a proposed procedural approach to planning internal evaluations, along with supporting references from the literature. Rather than creating new ideas on what should be included in such a plan, the procedure was a unique configuration of selected concepts of noted theorists which were arranged in a sequential order most closely resembling those of Cronbach, 1982. The initial draft

of this proposal and a description of the preliminary field testing are described in this chapter. Revisions which were then made to the procedure, based on the preliminary field experience, are subsequently outlined.

Chapter four describes the second field testing of the procedure within the same nursing program. The purpose of this field testing was to answer the fourth research question: would a procedural guide to planning educational evaluations be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program? (See Appendix A for an detailed outline of the steps used by the researcher in implementing the second field testing). Volunteer faculty members used the procedure to develop a simulated evaluation plan for their program. The sampling and methodology used are also outlined.

The results of this field experience are presented in chapter five. The data collected regarding the perceived importance and feasibility of using this approach are presented in this chapter. The conclusions and recommendations for further research are discussed in chapter six.

Chapter II

LITERATURE REVIEW

In this chapter, the first three research questions posed by this thesis are answered through a review of the literature on program evaluation. Following a statement of each question, there is a discussion of pertinent readings from the literature. Summary statements are then made.

Conceptual Models of Program Evaluation

The first question asked was: which of the existing conceptual models of program evaluation, developed by educational theorists, is most suitable for use by diploma nursing programs?

In the late 1960s and in the 1970s, different conceptual models of program evaluation were developed by American educators in response to the legislated evaluation mandate from their federal government. The purpose of a conceptual model should be to provide a logical framework from which one can make sense of the phenomenon perceived. It should also illuminate major concepts and their interrelationships. For the purposes of providing an organizing system for novice evaluators, the model should be relatively easy to comprehend the models reviewed in this and apply. In chapter, attempts are made by the various theorists to depict or explain,

both verbally and diagramatically, the major variables which interact in any program. The way in which the program is described forms the basis for the evaluation approach which is subsequently developed.

The use of a conceptual model as the basis for curriculum development is required of all diploma nursing programs by the Registered Nurses Association Approvals Process. Therefore, the use of a conceptual model as the basis for program evaluation was explored in this thesis. The major models for program evaluation presented in the literature were reviewed and analyzed for their suitability in guiding the internal evaluation of nursing progams.

A comprehensive overview and a summary chart comparing the major models for educational evaluation is presented in Worthen and Sanders (1973, chap. 3). The presentation made in Popham, however, is perhaps more comprehensible (1975, pp. 20-45). He outlines four descriptive categories of the various models available, using the overriding orientation of each as the basis for differentiation. He admits that his categorization is artificial and imperfect, but adds that his aim is to clarify. The four categories he proposes are: goal-attainment models, judgmental models emphasizing intrinsic criteria, judgmental models emphasizing external criteria, and decision-facilitation models. Popham's method of categorizing these models was used to organize the discussion of the first seven models addressed in this thesis.

Goal-attainment models

A model in this category would focus mainly on the degree of achievement of stated program goals as the basis for the assessment of merit. Popham associates the development of such models with the influence of Ralph Tyler.

(1949) asserts that general Tyler checks on the appropriateness of the goals and objectives of a program can be made in relation to the subject matter itself, the needs of the students and of society, as well as the theories of educational psychology. The most important aspect in his view, however, is to determine to what extent the educational objectives are actually being realized, as evidenced by behavioral changes in students. Therefore, there is a great need for clearly defined behavioral objectives to direct both the development and organization of learning activities, and the evaluation of program effectiveness. Tyler emphasizes that measures of student behavior should include more than just paper and pencil tests. He recommends the inclusion of other dimensions of measurement, such as direct observation and student interviews. The need for followup studies to evaluate longitudinal effects is also is evident that Tyler's theories, published noted. It in the 1940's, have influenced the development of all the subsequent theories of educational evaluation.

Tyler points out the importance of making a clear connection between the goals and objectives of the program and

the needs of the students and society. In nursing programs which prepare graduates who are expected by employers to have certain knowledge and skills in a work setting, this connection is particularily relevant. His emphasis on clearly defined behavioral objectives to guide the evaluation of learning is evident in many nursing curricula which stress competency-based learning. Tyler's principles, however relevant and appropriate to the evaluation of nursing programs, provide more of a general approach to planning an evaluation than a detailed framework.

The goal of Hammond's model of educational evaluation is to determine if the program is "really effective in achieving its expressed objectives" (in Worthen & Sanders, 1973. pp. He describes an educational program 157-169). 88 "thè interaction of specific forces within the educational environment" (p. 159). A cubic diagram is presented which depicts these forces in terms of three dimensions. Each dimmension is defined by its own set of variables which operate and interact within the graphic structure. The instructional dimension of the model includes organization, content, method, facilities, and cost as variables. The institutional dimension defined by the variables of child (student), teacher, is – administrator, educational specialist, family, and community. The third dimension, the behavioral dimension, is defined by the variables of cognitive, affective, and psychomotor behavior. Once these forces have been outlined and explained, he then places the cubic structure within another diagram, or model,

depicting the evaluation process (pp. 166-167). This second diagram outlines a systematic step-by - step procedural approach to evaluation. It begins with isolating the aspect(s) of the program to be evaluated, defining the relevant institutional and instructional variables, specifying objectives in behavioral terms, assessing the behaviors described in the objectives, and analyzing goal-attainment results.

The conceptual framework for evaluation which he proposes is extremely complex and would be overwhelming to beginning evaluators as a basis for planning an evaluation. The detailed breakdown of factors provided within each dimension and variable would, however, be very helpful in understanding the core and peripheral elements affecting a given aspect of the educational process. There is no clear philosophical statement to inform the reader of what is valued in Hammond's model. Although he suggests to initially focus the scope of the study by defining the program only in terms of what is to be evaluated (in Worthen & Sanders, 1973, p. 167), there are no guidelines given to assist in this selection process.

The third model Popham places in the goal-attainment category is that by Metfessel and Michael. A program, in their view, is defined in terms of specific behavioral objectives stated as "operational definitions involving measurable and observable changes in behaviors that have been judged to be significant and relevant to the broad goals and the philosophy of the educational institution" (in Worthen & Sanders, 1973,

p. 269). They outline an eight step procedural flow chart for implementing evaluation studies, similar to Hammond's, but with a more detailed breakdown of the steps. Their emphasis, too, is on identifying process and content elements and the degree to which these affect stated learning objectives (in Worthen & Sanders, 1973, pp. 269-288).

The objectives, or foci, of evaluation in Metfessel and Michael's procedural approach would depend on the emphasis given for the study by the planning group. Again, value statements to guide this selection process are not made. Included in their discussion is an excellent summary of the strengths and weaknesses of the various methods and instruments which could be used in the evaluation of specific behavioral objectives. This summary would be very useful to beginning evaluators in designing a methodology for an internal evaluation.

Judgmental models emphasizing intrinsic criteria

Both of the judgmental categories Popham proposes are distinguished by the weight given to the professional judgment of the effectiveness of a program as compared to set criteria or standards.

In the first of these categories, major attention is given to evaluating the intrinsic or process elements of the program, rather than the characteristics of the graduate. Therefore, such factors as books in the library, physical plant, faculty qualifications, and content of the curriculum is given close

scrutiny. The most prevalent type of this kind of systematic educational evaluation, Popham explains, is the accreditation model. The accrediting agency visits, and on the basis of previously determined criteria, judges if the program meets minimal standards. Suggestions for improvement are made when necessary (Popham, 1975, pp. 24-25). Preceding this visit, the faculty usually prepare a report of self-study and this can be a very useful internal exercise in formative evaluation.

Popham cautions against this emphasis on process criteria because of the scarcity of empirical evidence to confirm the relationship between these process factors and final outcomes (1975, pp. 24-25).

Judgmental models emphasizing extrinsic criteria

Again, in this category, professional judgment against set criteria is emphasized, but now with more attention given to the product of the educational program.

Stake's "Countenance Model" is placed in this category by Popham, although the fit does seem less than perfect. Stake defines two main operations as essential to educational evaluation: description and judgment. Both descriptive and judgmental functions would be applied to three sources of information: antecedent, transaction, and outcome data. He defines an antecedent as "any condition which existed prior to teaching and learning which may relate to outcomes", for example, entry behaviors and resources (in Worthen & Sanders,
1973, p. 116). Transactions are the "succession of engagements which comprise the process of education" (p. 116). Outcomes are "the consequences of the educational program: short and long-term, personal and community, cognitive and affective" (p. 116). Included here is also the measurement of cost and the impact on teachers, administrators, counsellors.

Two principal procedures are applied to the processing of descriptive data. The first one is to seek congruence between what was intended in each of the three areas and what was observed. This would note the presence and the degree of any discrepancies. The second procedure involves the analysis of data to seek both logical and empirical contingency the antecedents. (relationship) transactions. among and outcomes. This procedure serves an important function bv revealing total curriculum integration, both in intent and in practice. The focus in the descriptive matrix is on formative evaluation. The judgmental functions allow for both an absolute comparison with general standards of excellence, and relative comparison with other programs as referent criteria. This would be the summative focus.

Stake's model, with its view of the educational process as involving antecedents, transactions, and outcomes would point to general informational domains to be addressed in an evaluation study. The processes of seeking logical and empirical contingency among these elements are compatible with the approach to curriculum development required of nursing programs

in British Columbia by the Approvals criteria. Marriner, Langford, and Goodwin (1980) describe an attempt by a nursing program to apply this model to an internal evaluation. They note some difficulty experienced in applying the judgmental functions because this aspect of Stake's model is not as explicitly developed as are the descriptive functions. Moreover, having prior knowledge of the criteria which would be used to judge excellence before the data were collected, would ensure that the appropriate information was collected. It appears in Stake's model that the descriptive activities precede the judgmental, or comparison, functions.

Decision-facilitation models

Popham's fourth category is differentiated from the others, not on the basis of the nature of the data collected, but on the aim of the theorists to avoid personal valuing of the data collected (1975, p. 33). In these models, the decision maker is not the evaluator. The evaluator's role is to design the evaluation study and collect the relevant data to facilitate informed decision making by others, such as educators and administrators.

The best known of these, Popham contends, is Stufflebeam's CIPP model. Four different areas of a program which could be evaluated are identified: context, input, process, and product (CIPP). Evaluation design is defined as "the preparation of a set of decision situations for implementation toward the

achievement of specified objectives" (in Worthen & Sanders, pp. 143-150). There is a close relation between this 1973, design and management procedures. For all of the above four areas, certain procedural steps are outlined. The major step emphasized is focusing the evaluation study on the specific decisions to be made. This would involve identifying the level of decision making to be served, for example, local or provincial; projecting the decision situations in terms of locus, priority, and alternatives; and defining the criteria needed in making these judgments. Decision situations are further distinguished by the nature of their consequences within the educational system (in Worthen & Sanders, 1973, p. 37). Once these major decision-making areas have been examined, the next procedural steps would be to consider how the information would be collected, organized, analyzed, and reported to provide valid and reliable data for decision making.

Context, input, process, and product evaluations are described in terms of the information provided in each area. Context evaluation would provide the rationale for determining educational objectives, as well as identifying problems, needs, and opportunities within the educational setting. Methods are both descriptive and comparative. Input evaluation directs attention to the instructional resources, procedures, and strategies necessary to promote achievement of the program objectives. Proceas evaluation, employed once the program is in progress, addresses the effect of the activities which are

implemented against what was intended, along with particular strengths and weaknesses. Product evaluation emphasizes the measurement and interpretation of educational outcomes, not only at the end of the program, but also during the course. Outcomes are compared to stated objectives, as well as to external criteria.

In reviewing Stufflebeam's model, one gets a good understanding of the different purposes evaluation studies can serve. There is flexibility within his model to achieve these different ends. When compared to Stake's model, there are similarities between the major areas of evaluation. What Stake sees as antecedents, Stufflebeam has further differentiated into context and input. The interaction among the four elements of a program identified by this model is not as clear as it is in Stake's model. However, the inclusion of the decision-making aspects of educational evaluation would be valuable in helping to focus the purpose of the study.

Alkin's model, known as the CSE Model (after the UCLA Center for the Study of Evaluation), is also categorized as decision-facilitating by Popham. Evaluation is defined as the "process of determining the kinds of decisions that have to be made; selecting, collecting, and analyzing the information needed in making these decisions; and reporting this information to the appropriate decision makers" (in Popham, 1975, p. 37). Alkin, himself, points out that the CSE Model is similar to the CIPP Model, except that the area Stufflebeam calls process

evaluation is further developed (in Popham, 1975, p. 37). In the CSE Model, five areas or different kinds of program evaluation are identified and distinguished by the decision focus of each (in Worthen & Sanders, 1973, pp. 150-155).

Systems, or needs, assessment, the first kind of evaluation described, is the comparison of the current status of the program, for example, performance of the learners, with the desired outcomes or stated needs of the system (students, community, society). Resulting gaps would identify educational needs or goals. The decision focus is problem identification. The next area of evaluation is program planning, which focuses on selecting from alternative programs the one which meets the defined educational needs. The decision emphasis here is on program selection. The purpose of the third area of evaluation, program implementation, is to determine if the program is doing what was intended, particularily concerning the appropriateness of the program design and stated purpose. General outcomes are reviewed. Decisions now analyzed and center on program modification. The fourth kind of evaluation is program improvement, or progress evaluation. Efforts are made to identify the relative success of the specific objectives of the various components of a program, the goal of which is to improve deficiencies. Decisions focus any again on program modification. Both of these types of evaluations address the issue of formative evaluation. Program certification is the final type of evaluation identified in the CSE model, and it

focuses on the general worth and generalizability of the program as reflected by the outcomes produced. Such information would enable the decision maker to determine if the program should be eliminated, modified, retained, or introduced more widely.

The CSE model is based on a developmental view of programs, that is, the view that programs evolve educational stages of development from the initial needs through five assessment through to more general implementation. As well, typical program decisions are identified for each of these stages. The nature of the evaluation activities is determined by the program's stage of development and the comcomitant decision focus. By identifying five different types of program evaluations, the model could assist novice evaluators in the selection of a particular focus for their study. With the emphasis on decision making, it is also a practical approach to adopt. However, even with the decision focus, the influence of Tyler's input-output view of education is evident. Faculty using this model would have to agree with this view. The decisions stated in this model could be useful in structuring an evaluation plan. However, there may be other decisions, not mentioned by Alkin, which are more important to a given program, for example, determining the cost effectiveness of a certain staffing pattern.

Popham notes that the CSE model has been adopted by private consulting firms in the United States specializing in educational evaluation. It therefore has the potential for

widespread use by external evaluators.

With the decision-facilitating models, as with the goal-attainment models, there is the possibility of excluding important information about the program too early in the planning stages of an evaluation study because of the specific focus inherent in the design. With the former, the focus is on decisions to be made, with the latter, it is on the stated program goals.

Educational criticism (connoisseurship)

An approach to educational evaluation, not mentioned by Popham, was developed by Eisner (1979). He presents a unique view of educational evaluation compared to the previously described approaches. He states that one of the shortcomings of prevalent educational evaluation practices is the expectation that all educational aspirations will be either verbally describable or measurable (p. 98). Life, he states, is not always linear, and the educational experience is "as multilayered as a work of art" (p. 216). Rather than present a paradigm of evaluation, Eisner proposes to supplement the traditional quantitative procedures with a type of qualitative evaluation he calls "educational criticism" (p. 193). He likens it to art appreciation or connoisseurship, in that the evaluator is able to perceive subtleties and intricate ways certain particulars form part of a structure. He states that

quantitative evaluation studies give a deceptive sense of educational precision, whereas the way to convey the richness, complexity, and ambiguity of the educational experience is through qualitative evaluation. By using both approaches, he states that one can achieve "binocular vision through complementary forms of inquiry" (p. 198).

are three phases to educational criticism There 88 he describes it. The descriptive phase would illuminate the environment, tempo, and cultural style of qeneral the classroom. The rules and values under which the classroom operates also would be described. Next, in the interpretive phase, questions would be posed such as: what does the situation mean to those involved or what ideas, concepts, or theories can be used to explain its major features? The evaluative phase would involve the application of educational criteria to judge the worth of what was perceived.

implement this method of evaluation would require the То evaluator to have both a broad base of experience in educational practices and a broad theoretical background in the social sciences and education. The reporting methods would also be Antecdotal descriptions, similar to critiques quite different. of art or music, would be required. Audio or video tapes could also be This qualitative approach to educational used. evaluation might be difficult for inexperienced evaluators to implement. However, the philosophical approach to program evaluation described by Eisner does have relevance to nursing

34.

programs. Nurse educators struggle to evaluate the affective behaviors of students because such behaviors are believed to be important in nursing. The affective quality of the program itself should be equally as important. Eisner does not specify how the quantitative aspect of the evaluation should be done. His approach would have to be supplemented by using one of the other models to organize this aspect of the evaluation.

A nurstng model

Allen (1977) has proposed a model with direct application to the evaluation of educational programs in nursing. Her model revolves around three fundamental criteria which she sees as applying to all nursing programs. These are:

the relevance of the goals, activities, and outcomes to the (health) needs of a particular community or country; the relatedness of the different parts of the program in seeking common goals and in discovering the means to achieve them; and the accountability of the program in teaching that the primary responsibility of the nurse is to the patient or client (p. 9).

These criteria, she notes, form the basis of the evaluation process as well as being the overall goals for guiding the development of the curriculum. Also, each program is viewed as a system in her design and recommendations are given to gather information on the various parts of the system in order to understand its dynamics (p. 14). Programs are described as being in one of three curriculum developmental phases: the initial or planning phase, the implementation phase, and the outcomes phase. Evaluation activities are described in terms of their

functional relevance to each phase.

Allen's model, the most recent in the series of conceptual frameworks discussed, synthesizes many of the concepts presented by earlier theorists and applies them specifically to nursing programs. Tyler (1949) mentions the importance of connecting the goals and objectives of any educational program to the needs of society. Stake's model (1967) emphasizes the need to seek logical and empirical contingency among the antecedents, transactions, and outcomes of a program, what Allen refers to as the relatedness of the different parts of the curriculum.

Allen's choice of the three criteria does make a clear value statement about what should be valued in both the curriculum of a nursing program and in the evaluation of that program. However, there may be certain unique features or goals of a program which are not addressed by these criteria, for example, the development of communication skills. The need to plan program evaluation activities in terms of the developmental phase of the curriculum is seen as an important feature of Allen's model. This could help in directing the focus of an evaluation plan to the most appropriate areas and activities within a given program.

Allen's model has been accepted for use in determining desirable standards of performance in accrediting Baccalaureate Programs in Nursing (Canadian Association of University Schools of Nursing, 1983). One other criterion has been added by this Association: that of uniqueness, or the "extent to which a

program capitalizes on the unique characteristics of its setting and resources" (Canadian Association of University Schools of Nursing, 1983, p. 8). In this document, indicators for each criterion are presented along with examples of behaviors relating to each indicator and a scale upon which to rate that evidence (pp. 12-20). Adoption of Allen's model by this national group of nurse educators is one indication of acceptance by the nursing community of its usefulness and validity in the external evaluation of programs.

Summary

All the models reviewed seek to describe the same phenomenonan educational program. Differing philosophical beliefs about education, as well as differences in the perceived role educational evaluation should play, account for some of the variance in each of the theorist's orientation to the task. The terminology used to describe the same element in the educational process is different in many of the models. Some stress the affective quality of programs; others stress the competencies of graduates as directed by clearly defined objectives. What is evident in reviewing all of these models is the complexity and richness inherent in an educational program.

Rather than facilitate the selection of one model of educational evaluation, the researcher felt that this literature review revealed that each of the models presents some important concepts relating to educational evaluation, or to the educational process, which could be relevant to the internal

evaluation of a diploma nursing program. Certain variables affecting the educational experience reappear in many of the models. These are the context or institutional variables, the student variables, and the instructional variables. The detailed description of how each of these variables would operate could vary from one program to another, but it seems important that they be addressed in any evaluation. A model which would be of great assistance in planning the methodology of an evaluation study would be that of Metfessel and Nichael. Their summary of the atrengths and weaknesses of some methods of collecting evaluation data would be very useful to novice evaluators.

Given the complex and unique features of all educational programs, it is doubtful that the needs of an evaluation could be met by any one model. Some authors note that the use of a conceptual model, in its entirety, as a basis for implementing an actual program evaluation has not been demonstrated (Marriner et al, 1980; Popham, 1975; Worthen, 1977).

Benefits and Limitations of Conceptual Models

The second research question posed in this thesis was: what are the benefits and limitations of using a conceptual model as a basis for program evaluation in nursing education? In the recent literature, certain concerns are raised by some authors about the use of conceptual models to guide evaluation studies. The first of these concerns is that the models are too Models, as organizing frameworks, can be useful general. in delineating generally the main variables that comprise the educational experiences within a program. Informational domains could be identified and concepts selected to guide the design of the study, the selection of methods, and the analysis of data. As such, they are generalized plans for generalized programs. Bricknell (1981) noted that "a weakness of every model is in the missing of the particular, uncommon [unique]" aspects of a given program (p. 97). In practice, theoretical models are frequently blended or adapted to meet the particular needs of a program or of an evaluation study (Popham, 1981; Worthen, 1981). Models should be viewed "not...as a methodology for actually conducting evaluations, but rather as persuasions or frameworks within which more specific constructs and methods must be placed" (Borich, 1983, p. 61).

When selecting the particular focus that a given program evaluation could take, there are some factors noted in the literature which are useful to consider. The importance of identifying the critical decision-making needs of the program, emphasized in some of the earlier theoretical models (Alkin, 1973; Stufflebeam, 1968), is supported by many program evaluators as a critical factor in planning evaluations (Popham, 1981; Weiss, 1972). Some authors call this process specifying the informational needs of the program (Hagen, 1979; Worthen, 1981). Another aspect of importance in tailoring the evaluation to the unique needs of a given program is identifying the real issues, or problems operating in the program (Lewy, 1981). Considering the timeliness of certain information to the decision-making process within a program is also noted as a valuable planning activity (Lewy 1981; Sichel, 1982). The evaluative questions that are asked about the program can themselves form the focus or organizing framework for the study (Sichel, 1982; Vaughn, 1979; Worthen, 1981).

The limitations of a generalized theoretical model in identifying the unique features of a given program or in fulfilling the purposes of a specific evaluation study are valid criticisms of models. However, there is a need to conceptualize or specify the program under study when planning a study (Weiss, 1972). Understanding the component parts of a program is an essential prerequisite to asking the right evaluative questions (Weiss, 1972, p. 46) and in delineating the major informational domains (Madey, 1982). This can be done by using a generalized model as a starting point (Borich, 1983), or by studying the program itself (Weiss, 1972). Cronbach (1982) cautions not to trust the final conclusions of a study "unless...nothing that matters in the real world was left out of

the model" (p. 161).

Another concern revealed in the literature about the use of the described models is the appreciation of the underlying philosophical bias intrinsic in each (House, 1978; Papagiannis, Klees, & Bickel, 1982). Scriven (1973) noted that control of bias can be achieved only once recognition of the presence of bias is acknowledged. Evaluation, itself, is a value-laden activity (Eisner, 1981, Wasserman, 1979). The open acknowledgement of the philosophical biases of external evaluators is receiving more attention in the literature (Bonnet, 1981; Eisner, In addition, the need to be aware of the values operating 1981). within the program itself, and by those who read the evaluation report, is of importance (Bonnet, 1981; Borich, 1983; Cronbach, 1982). "A program must be justified in terms of the values, needs and concerns of those from whom the impetus for the program originated" (Borich, 1983, p. 62).

Bonnet supports this view by describing the judgments made about program worth as being "rational evaluative decisions made by integrating relevant information with the values ... of the community" (1981, p. 11). The selection, or omission, of the evaluative questions asked about a program are in themselves indicators of the values held (Shumaker, 1979; Sichel, 1982.) The need to clearly explicate the basis on which value judgments are made concerning a program was emphasized by the Joint Committee on Standards for Educational Evaluation (1981).

Another shortfall of using a generalized model is the omission in the models of the need to identify the intended primary audiences of the evaluation report. Identifying the audiences for each evaluation question is described by some authors as a critical first step in planning an evaluation study. This will help ensure that the information provided will be credible to those who receive it (Cronbach, 1982; House, 1978; Joint Committee on Standards, 1981; Morris & Taylor Fitz-Gibbon, 1978; Worthen, 1981), and also be responsive to their needs (Cronbach, 1982; Joint Committee on Standards, 1981; Madey, 1982; Worthen, 1981). "Unless an evaluation provides an explanation (to increase the understanding) of a particular audience, by the content and form of arguments provided, it is not an adequate evaluation" (House, 1980, cited in Cronbach, 1982, p. 110).

A further concern expressed with the use of models is that they do not address the inevitable limitations imposed by application in the real world. The resources available, in terms of manpower and budget, will always impose limits on the scope of the evaluation atudy. Out of necessity, the evaluation will have to focus on certain aspects of the program while ignoring others. The models do not give direction as to how this selection process should occur.

Moreover, the models do not illuminate the political forces which influence all educational programs in real and important ways. The need to be aware of the political context of educational evaluations is emphasized by many authors in the recent literature (Bricknell, 1981; Cronbach, 1982; Morris & Taylor Fitz-Gibbon, 1978; Weiss, 1975; Worthen, 1981). In

particular, there is the need to consider the "political benefits" of an evaluation study (Weiss, 1975, p. 18) and the need for evaluation "to enter the thinking of the relevant political community" (Cronbach, 1982, p. 8). Weiss states that "knowing that there are political constraints and resistances... is a precondition for usable evaluation" (1975, p. 15). She notes the vulnerability that programs have to interference from such external power groups as legislatures, interest groups, and professional groups, and connects the process of educational evaluation to the "politics of program survival" (p. 15). Awareness of the political environment in which all programs operate is certainly an important and practical point of reference when designing a study. The reality of the legislated evaluation demanded of college programs in British Columbia by Bill 52 must be addressed.

Summary

Certain benefits and limitations of conceptual models 85 guides for planning evaluation studies are evident in the literature. Three major benefits are apparent. The models do present different ways to conceptualize or specify the program under study. They also can increase understanding of the component parts of a complex entity and thus define informational domains. Lastly, as Worthen (1977) points out "the value of the models lies in their ability to help us think, to serve as mental checklists of things we ought to consider, or remember, or worry about" (p. 11).

However, these benefits are outweighed by some important limitations. These limitations may be summarized as: models are general, whereas programs are unique and specific; models do not give direction on how to adjust the scope of the study to resource limitations or to the timeliness of certain information to decision-making needs: models have a philosophical bias which may not be openly acknowledged and which may differ from that of the user; models do not address the need to specify the report and therefore may lose of the audiences sone credibility; and lastly, the issue of the political context in programs exist is not specifically addressed. which all Conceptual models therefore, as a basis for planning internal evaluations of nursing programs, do not seem to be the most advisable approach.

Standards for Evaluating Evaluation Studies

The third research question asked in this thesis was: can a single approach to educational evaluation encompass the differing goals and roles that program evaluation in nursing education may serve?

In the literature, the late 1970s mark the beginning of a trend which goes beyond a conceptual emphasis on models as frameworks for evaluating programs. There is a shift to a procedural emphasis outlining certain standards or criteria by which the quality of the evaluation studies themselves are judged (Bonnet, 1981; Cronbach, 1982; Joint Committee of Standards, 1981; Morris & Taylor Fitz-Gibbon, 1978; Worthen,

1981). The purpose of a given evaluation study and the depth and scope of the information collected are not predetermined by the above mentioned standards. Rather, that these factors be determined by the planners of the evaluation is stated as the standard to achieve. As such, there is flexibility for the study to adapt to the unique evaluation needs and special features of any given program.

These standards accommodate many differing also philosphical biases toward evaluation; the important issue is that these biases be openly revealed and justified by the evaluators (Bonnet, 1981; Cronbach, 1982; Joint Committee on Standards, 1981; Worthen, 1981). Morris and Taylor Fitz-Gibbon (1978) their Evaluator's Handbook procedural provide in guidelines to planning an evaluation study which are based on Alkin's CSE model (1973). However, the philosophical issue is not as clearly addressed in their proposal as it is in the other cited standards.

Audience identification is an area indicated in all the standards reviewed as an important criterion in establishing credibility for the report and in meeting the information needs of the decision-makers (Bonnet, 1981; Cronbach, 1982; Joint Committee on Standards, 1981; Morris & Taylor Fitz-Gibbon, 1978; Worthen, 1981). All of the cited standards for evaluating programs also mention the need to consider addressing the needs, opinions, and values of those political groups which influence the functioning and decision-making of the program under study.

Clearly stating the evaluation questions to be asked by the

study is another standard included by these authors. In the researcher's view, it is Cronbach (1982) who offers the most comprehensible and practical approach to the planning and implementation of evaluation questions as an organizing framework for a study. The evaluative questions themselves are worded in such a way that the formative evaluation aspects of the phenomenon under study are addressed, that is, why was this experience successful or why was it a failure (p. 14).

Cronbach explains further that each evaluation question could form one component within an overall evaluation design. Each of these components would plan to incorporate four elements he sees present simultaneously, and which provide for an exhaustive study of each question (1982. chap. 3). These four elements, the UTOS, are the Unit or sample, the Treatment, the observing Operation(s), and the Setting. He states that a "domain of investigation" regarding a given subject is then formed by these four elements (p. 80).

The unit and treatment elements mentioned by Cronbach are also alluded to by other authors who, however, use different terminology to describe them. Determining the unit(s) and treatment(s) is called "object identification" by the Joint Committee on Standards (1981, p. 99). This concept is further described by the Committee as "the clear identification of the particular thing: instructional material, procedure, outcome under study" (p. 99). Worthen (1981) described this aspect of planning evaluations as "characterization of the object of evaluation" and "the specification of information needs and source" (p. 82). In traditional research design, it would be the selection and operationalization of the constructs under study.

The term "observing operations" used by Cronbach refers to the procedures or data collection instruments selected for the study (chap. 3). The setting would describe factors in the local situation, or organizational characteristics, which have an immediate influence on the object of study (p. 82). This process of describing the setting is also included by the Joint Committee on Standards (1981) as "context analysis" or the process of examining "the combination of conditions surrounding the object that may influence its functioning" (p. 104). Examples given by the Committee of such conditions are the political and social climate in the region at that time, relevant professional activities in progress, and the nature of the staffing (p. 104). Such information gives the evaluation findings the appropriate context for judging effectiveness.

Although the other cited authors include these steps in planning evaluations, Cronbach relates them specifically and concisely to each evaluation question. This method of organizing the plan would be particularly helpful to the inexperienced evaluator. In his proposal, each question also includes a timeplan (p.83) and a budget for distributing resources (p.218).

Another strength perceived in Cronbach's approach is the advice to alternate the processes of divergent and convergent thinking when devising the plan. The divergent phase would require the use of naturalistic and qualitative methods, and a wide variety of informants, to appreciate all possible evaluative questions that could be asked about the program. The convergent phase would assign priorities to the questions which would then form the basis of the study (p. 210). Using these processes, the omission of questions becomes a deliberative act and "not the inadvertant consequence of limited vision" (p. 210). The convergent phase would also consider the limitations of the available resources, the ability to manage the information collected, and the focus of the report (p. 224). As well, it would consider the values of the participants and policy-shaping community (p. 228). This aspect of Cronbach's proposal makes it the most practical in approach while, at the same time, taking into consideration the credibility of the report.

Summary

The standards described in the literature for use in the expost facto evaluations of evaluation studies themselves could be adapted into a procedural approach to the planning of an evaluation study. This would provide a structured and relatively simple conceptual approach to planning evaluations. Such qualities are important aspects to consider when proposing a procedure for novice evaluators. The major components espoused by the authors cited could be adapted to fit the practices prevalent within diploma nursing programs. Although these criteria were developed to evaluate external evaluations of programs, they

could also be used to help in the planning of internal evaluations.

the authors of the models Whereas reviewed base their approach to evaluation on a certain view of educational Cronbach's method focuses on the evaluation process programs. itself. Although general categories of information about each program are designated in his procedural approach as important to consider when planning the evaluation, how that category is operationalized is left to the devices and personal biases of the user. For example, Cronbach's unit, treatment, operations, and setting elements form one domain of investigation. What is to be studied or how it will be studied is not specified as it in the models. For instance, Stake's Countenance model is points to examining the antecedents, transactions, and outcomes of a program for both logical and empirical congruence.

Statements philosophy within of program the nursing programs could be used as the philosophical basis for the evaluation plan. All the methods currently used to evaluate the curriculum for the purposes of program approval, or program effectiveness, could be coordinated and organized by an overall framework of evaluative questions. There would then be a deliberative and systematic allocation of resources to all the evaluation endeavors of the program.

It appears from an analysis of these standards, that a procedural approach to planning the internal evaluations of diploma nursing programs could encompass any of the different possible roles program evaluation could play. Also, in the researcher's opinion, the systematic and structured approach inherent in a procedure would have a higher probability of increasing the skills of nursing faculty with little experience in planning program evaluations than would a conceptual approach.

Chapter III

DEVELOPMENT OF A PROCEDURAL APPROACH

This chapter begins with a summary of the rationale used in selecting a procedural approach to planning an internal evaluation. The first draft of the procedure is described, as is the method used for the initial field testing. The six steps which comprise the revised version of the procedure are presented in detail, along with supporting references from the literature. Finally, there is a brief summary of some recommendations made in the literature about writing an evaluation report.

Rationale for Selecting a Procedural Approach

Given the limitations of conceptual models as a basis for program evaluation described in the review of the literature, a procedural approach to planning internal evaluations of college-based nursing programs was adopted for this thesis. The focus, therefore, was not on one conceptual view of an educational program. The process of planning evaluation studies was emphasized. The proposed procedure presented a step-by-step process for planning evaluations which was based primarily on the ideas of Cronbach (1982). The ideas of other educational theorists were used to clarify or elaborate on certain aspects of developing the plan.

Rather than present new ideas on what should be included in

developing an internal plan for evaluating nursing programs, the procedure proposed by this thesis is a unique configuration of selected concepts presented in the literature and arranged in a sequential order most closely resembling that of Cronbach (1982). Applications are made to the operations typical of college-based diploma nursing programs. The aim in field-testing the procedure was to measure the degree of feasibility and importance of this procedure perceived by the faculty who would subsequently use it. Such data were used to further modify the procedure.

The following definition of program evaluation formed the basis for the proposed procedure: it is a process used to judge the worth of an educational program which

brings to a conscious level and in a form to expedite decision-making, the assumptions and values inherent in the educational program, to relate these to anticipated procedures and expected accomplishments and to compare these plans with actual functioning and results.

(Dressel, cited in NLN Pub.No.16-1773, p. 15)

The ultimate form and focus of the evaluation plan resulting from the application of this procedure was determined by the systematic decision making of the group of faculty responsible for the evaluation plan. Subsequent applications by other faculty groups could produce differing plans. The procedure was designed to give faculty this flexibility in creating and owning their own unique evaluation plan.

The cognitive approach inherent in the procedure was based

Cronbach's views of alternating convergent and divergent on thinking at various phases of developing an evaluation plan (1982, chap. 7). This approach is the same as the cognitive processes used by nursing faculty in the application of the nursing process. The familiarity of nurses with this method of problem-solving helped determine the selection of Cronbach's approach to evaluating programs as the basis for the procedure, data are collected from various sources, then that is, specific data are selected and ordered to define priority needs. Omission of factors is a deliberate choice, based on the best knowledge of all that is possible to evaluate.

The First Draft of the Procedure

The first draft of a procedural approach to the planning of internal evaluation of a college-based diploma nursing an program was designed in January 1983. At that time, the researcher was a full-time faculty member of the nursing department of a college diploma nursing program, and chairperson of that department's Program Evaluation and Research Committee. Because of plans within the department to make major revisions in both the organization and content of the nursing program in the fall of 1983, the eight person committee decided to develop a systematic plan to evaluate the implementation of this. new curriculum. With the committee's agreement, the researcher proposed to draft an approach to this task, based primarily on Cronbach's views (1982). The ideas of other authors were used

to clarify and elaborate certain aspects of developing the The Program Evaluation and Research Committee plan. waa composed of nursing faculty members, three of whom had experience in program evaluation and four others with an expressed interest in developing these skills. The Director of Nursing Programs attended two of the four planning meetings held monthly January-April 1983.

The initial draft of the procedure is outlined in Appendix в. The first step in this procedure was to review the program philosophy which had been recently ratified by the whole faculty for the new curriculum. Because all judgments of educational worth are ultimately made on the basis of personal or group values, it is important to discuss these and state them openly when designing a plan for evaluating programs (House, 1978; Papagannis, Klees, & Bickel, 1982). All nursing programs have a written statement of philosophical beliefs. The philosophical basis for evaluating the worth of a nursing program should be congruent with the philosophical basis for developing the curriculum. This aspect of the proposed procedure acknowledged the philosophical biases of the evaluators (Bonnet, 1981; Eisner, 1981), and revealed the values operating within the program itself (Bonnet, 1981; Borich, 1983; Cronbach, 1982).

The program philosophy was further connected to the evaluation plan by using the stated philosophical beliefs of the program to help in eliciting the major concepts (variables) seen as important to the educational process within the program.

the interrelationships among these concepts Also, were The philosophical statements of the program were described. therefore used to draw a graphic picture of what was believed to comprise the program (see Appendix C). This step is described by Cronbach as "imagining the program processes" (1982, pp. 216-217). Weiss notes the importance of understanding the component parts of a program as an essential prerequisite to asking the right evaluative questions (1972, p. 46). Conceptualizing the program would also delineate the major informational domains (Madey, 1982). Saracho (1982) emphasizes understanding the program's operational components, that is, the major characteristics, the surrounding conditions, and the important processes (p. 75).

An analysis of the conceptual models of program evaluation by the researcher had revealed three common major groupings of variables which describe an educational program (Allen, 1977; Hammond, 1973; Stake, 1967; Stufflebeam, 1973). These are institutional; instructional, or content and learning activities; and student variables. The committee was directed to address these major groupings in the graphic description of their program.

The purpose of this activity was to provide, for the audiences of the report, a context to communicate meaning and a visual schemata to increase the clarity of understanding. There would then be a depiction of the whole and the component parts of the program. This could assist the audiences to generalize the findings of this evaluation report to similar programs.

The next step, stating the purposes of the evaluation, was to focus the thinking of the group on certain activities or evaluation questions (Cronbach, 1982; Standards, 1981; Worthen, 1981). Determining the audiences of each question, the third step, was included because of Cronbach's view that directing the information to specific audiences would increase the plausibility of the conclusions (p. 108), and increase the credibility of the report as a whole with those audiences (p. 161).

Alternating divergent and convergent cognitive processes when selecting evaluation questions, steps three and four in the draft proposal, would increase the rationality of the plan and justify both selection and omission of questions (Cronbach, 1982, p. 210). The factors listed to assist in the selection of evaluation questions were taken from chapters seven and nine of Cronbach's book.

The final step in the procedure, that of allocating resources, determining the time dimensions, and selecting the methodological approach for each central question, was taken from cnapters three and eight of Cronbach (1982).

Initial Field Testing

The initial field testing of this proposal by the committee indicated the appropriateness and usefulness of using the philosophical statements of the program to elicit the main variables operating within the program (see Appendix C). Three main purposes of the evaluation were then decided on by the

committee, aithough these were stated in quite general terms. These were to improve/revise the content and learning activities, to improve the program delivery, and to report information to specified groups as a way of being accountable to the community.

The next step, that of listing all possible evaluation questions that could be asked about the program and indicating the primary audience for each, provided some difficulty to the committee members. This was a very time consuming task. The committee decided to break into smaller sub-groups, with each sub-group suggesting possible questions for one of the major variables outlined in Appendix C, the program picture. Based on this experience, the researcher felt that it would have been more time efficient if, prior to suggesting possible evaluation questions, the scope of the study would have been focused more specifically.

The committee made positive comments about the list of factors given to assist in the selection of questions, as well as the UTOS methodology suggested in Cronbach's model. These latter two steps in the proposed procedure were only discussed with the committee in the initial field testing because of intervening summer vacations. As a general comment, the committee mentioned that it would have been more effective to have had longer blocks of time to work on the development of the plan than the two hours per month normally designated by the department for this committee's work. Four-hour meeting times

Revision of the Procedure

Based on the experiences of the researcher in the initial field testing with this group, the procedure was revised to comprise six major steps (see figure 1).

The process of using a Program Evaluation Steering Committee was seen as a functional way for nursing faculty to implement this approach to planning an internal evaluation study. This group could work through the steps in the procedure, returning periodically to the faculty at large to validate the outcomes of their discussions. It is suggested in the literature that the credibility of a study would be increased if the information selected by the Steering Committee was validated with as many interest groups as is practical, for example, other faculty, students, administration (Bricknell, 1981; Worthen, 1981).

The procedure was intentionally designed to be a systematic, structured approach to a complex task. Although a faculty group would need some assistance and clarification in the initial application of the procedure, the intent was for this experience to increase the skills of those involved so that in subsequent applications they could independently develop their own evaluation plans.

FIGURE 1

OUTLINE OF A PROCEDURE FOR DEVELOPING AN INTERNAL EVALUATION OF A NURSING PROGRAM*

1. COLLECTING DATA ABOUT THE PROGRAM



*Adapted primarily from L. Cronbach. Designing evaluations of educational and social progams. San Francisco: Jossey-Bass, 1982.

Steps in the Revised Procedure

1. Collecting data about the program.

The major changes made in revising the procedure related to expanding the steps prior to focusing the purposes of the study. The first step now was to collect five major categories of information about the program. The use of the program's philosophical statements to define the major variables affecting the educational experiences, or drawing the program picture, was retained. However, it was decided that more data about the program, and the context in which the program existed, needed to be collected at this stage.

To make this data collection task manageable and focused, four other specific informational domains were defined: intended outcomes of the program, unintended outcomes, important issues or problems affecting the program, and the views of program critics (see figure 1). These categories of information were mentioned by Cronbach (1982, chap. 7) as some of the factors to consider when selecting evaluation questions to be asked about a program. The researcher felt that these same factors could be used earlier in the planning stages of an evaluation to help focus the purposes of the study more specifically.

Also, a further review of the literature supported the appropriateness of including these categories of information. Many other authors cite the importance of reviewing stated educational goals, or intended outcomes, when evaluating program effectiveness (Hammond 1973; Lynch, 1978; Metfessel & Michael, 1973; Stake, 1967; Tyler, 1949). Reviewing intended outcomes at the preliminary phase of planning an evaluation was therefore added to the procedure. The unanticipated or unintended outcomes of the program are also mentioned as important considerations in program evaluation, and were therefore included in the revision (Cronbach, 1982; Eisner, 1979; Scriven, 1973).

fourth category of information to be collected about The the program at this stage of planning the evaluation was a list of the important issues or problems affecting the program. Consideration of this information relates the timeliness of certain evaluation activities to the most critical informational needs of the program (Lewy, 1981; Sichel, 1982; Standards, 1979). Allen notes that nursing programs should be responsive and relevant to community needs, that is, address relevant issues and problems (1977, p. 9). The position paper adopted by the Board of Directors of the RNABC in November 1983 states that nursing education is currently at a critical decision point in its evolution. This paper notes certain health care issues or trends in Canada which impact directly on nursing, and which "necessitate a review of the initial and ongoing educational needs of nurses" (RNABC News, JAN/FEB 1984, p. 16). Five major trends or health care issues affecting nursing which were cited are: the shift in morbidity rates from infectious diseases to chronic illnesses and accidents; an increasing proportion of aged members of the population; increasing acuity and complexity of illnesses treated in acute care facilities; an

linked to lifestyle factors and increasing incidence of diseases and the financial need to find stress: leas expensive alternatives to hospital-based care. These are community issues which affect all diploma nursing programs. There may be other important internal issues or problems affecting a particular program. Characteristic issues or problems should also be illuminated by the stage of curriculum development of a given program (Allen, 1977; Hagen, 1979).

The last category of information included in the data collection stage of the revised procedure is that of the views of program critics. Cronbach (1982) emphasizes the need to consider these views when designing a program evaluation, as do Allen & Reidy (1971). Consideration of this information was seen by the researcher as one way to address the political context of educational evaluation noted by many authors as important (Bricknell, 1981; Cronbach, 1982; Morris & Taylor Fitz-Gibbon, 1978; Weiss, 1975; Worthen, 1981).

As well as delineating five specific categories of information about the program at this stage of the planning, it was decided that it would be helpful to the faculty using the procedure to have possible data sources indicated. As waa mentioned, the philosophical statements were used as a basis for drawing the program picture. The stated program goals, or overall objectives, would indicate intended outcomes. Information about unintended outcomes, important issues or problems, and critics' views would be collected by using qualitative procedures such as open-ended questionnaires or
interviews. Data could be collected from students, faculty, and staff in clinical agencies; major data sources indicated in the Allen & Reidy study (1971). It is suggested that these insiders would have the best information concerning the issues that should be evaluated (Worthen, 1981). The use of "qualitative probes... can pinpoint and establish priorities of informational needs" (Madey, 1982, p. 227).

This information should be collected, summarized and circulated to the Steering Committee members prior to their first meeting. This would give members time to review and analyze the information. It would also make the procedure more time-efficent, a concern expressed in the initial field-testing.

2. Selecting the most important decisions to be made about the program and designating the decision makers.

Because of the time and effort spent in the initial field-testing of the procedure on listing all possible evaluation questions about the program, it was decided that a useful early step in the planning would be to direct the thinking of the committee to the most important decisions to be made about the program. The five categories of data, which were previously described, formed the informational base from which possible decisions about the program were suggested. The need to connect program evaluation activities to the critical decision-making needs of the program was identified in some of the earlier conceptual models of program evaluation (Alkin, 1973: Stufflebeam, 1973). It is also supported in other publications

(Popham, 1981; Weiss, 1972). Some authors call this process specifying the informational needs of the program (Hagen, 1979; Worthen, 1981).

The committee planning the evaluation reviewed the collected data, then by using a brainstorming technique in small groups of two or three, made a list of possible program decisions which seemed relevant to the data. Selecting and rank ordering of decisions was done by using a rating scale devised by the researcher (see figure 2). An example of a program decision suggested by the group is: Do we need to increase the amount of time our students spend in the clinical area?

Each decision was given a numerical value, based on a 1 - 5 scale of importance to the program, for each of the criteria listed. A value of 1 would be the least important, whereas a value of 5 would indicate the most important. The total point value allotted to each possible decision helped the committee eliminate some potential decisions and retain others. The factors selected for use in this decision-rating scale were taken from the literature.

The first criterion in the rating scale, consideration of the stated values of the program, made the philosophical connection to the evaluation plan (Bonnet, 1981; Eisner, 1981; House, 1978). Student needs; timeliness of information to program planning; resources available within the program to SELECTION OF EVALUATION QUESTIONS

DECISION-RATING SCALE

RATE EACH DECISION ON A SCALE OF 1-5 OF IMPORTANCE

	TOTAL POINTS	
CRITERIA	DEGREE OF INFO NEED	
	FUTURE IMPACT ON PROGRAM	
	VALUE GIVEN BY CRITICS	
	POLITICAL LEVERAGE	
	STAGE OF CURRICULUM DEVELOPMENT	
	AVAI LABLE RESOURCES	
	TIMELINESS OF INFORMATION TO PROGRAM	
	STUDENT NEEDS	
	STATED VALUES OF PROGRAM	
	EVALUATION DECISION	

FIGURE 2 A DECISION-RATING SCALE

manage certain information; degree of informational need, or the degree of prior uncertainty as to nature of the data that would be obtained; political leverage; value given by program critics; and future impact on program were factors cited by Cronbach as issues to consider when selecting possible evaluation questions about a program (1982, chap. 7). These same factors were adapted by the researcher for use in selecting and rank ordering possible decisions to be made. The stage of curriculum development of the program was included, in the rating scale because certain program decisions are more important than others for a new curriculum versus a well-established one (Allen, 1977: Hagen, 1979).

Once decisions were selected and rank ordered, decision makers were specified for each. The final evaluation report could then be tailored to the specific decision-making needs of identified people. This aspect of the revised procedure therefore addressed the consideration of the audiences of the The decision makers were viewed as the audiences or report. readers of the evaluation report. It is noted in the literature that the credibility and validity of the evaluation report will depend, in part, on the needs and expectations of the audience receiving the report (Cronbach, 1982; Stake, 1976).

Connecting the planning of a program evaluation to facilitating decision making within the program was seen by the researcher as a practical way to give such evaluation activities credibility and importance with both the nursing faculty and

the administration of the program. Vaughn states that to be effective and successful, program evaluation activities must be viewed by faculty as valued and worthwhile, as well as be given administrative support and attention (1979, pp. 22-23). Saracho (1982) emphasizes that only the persons who have the experience, or the continuous contact with the program, are in the position to determine which decisions would be most beneficial (p. 76). Stake reinforces this view by stating that only the insiders can know the consequences of certain judgments about a program (cited in Saracho, 1982, p. 76). Also, if an evaluation study needs to focus on certain aspects of the program and ignore others, this would be one practical way to direct the selection process. In times of fiscal restraint, college faculty are becoming increasingly aware of the importance of participating in decision making. Many college-based nursing programs in British Columbia use a participatory style of management, therefore this aspect of the procedure was designed to be congruent with such a management style. Use of a rating scale was selected as one way to make the planning of the internal evaluation more objective and also more justifiable to others.

3. Determining the purposes of the program evaluation.

Stating the purposes of the program evaluation, after considering the most important decision making needs, would narrow the scope of the study and assist the group in suggesting

appropriate evaluation questions. Stating the major benefits to the program which could result from an evaluation study, could help the Steering Committee specify these purposes. Thus, the boundaries of the study would be determined after consideration was given to what information is needed and valued most by both the nursing department and the intended audiences of the report. At this point in the planning, the committee should openly discuss the issue of "token" versus meaningful program evaluations. Worthen emphasizes that an important activity in the early planning stages, is to address whether preconceived positions about the program are really open to be changed by the evaluative data (1981, p. 68). This was felt to be a particularily important discussion in the planning of an internal evaluation where certain faculty groups may have a vested interest in maintaining the status quo, regardless of the evaluation findings.

4. Selecting and phrasing of evaluation questions.

The list of rank-ordered decisions provided the committee with a basis for selecting relevant evaluation questions. The defined purposes of the study, and the major concepts emphasized in the philosophy of the program could be reviewed to assist in this activity. Because resources available for program evaluation within a nursing department are ultimately finite (people, funds, time), the evaluation questions selected should be realistic in terms of the ability and limitations of the faculty to collect

and manage data.

Selected evaluation questions were then phrased in terms of facilitating factors and blocking factors as a way of directing the plan toward the collection of information that would be the most useful to the program (Cronbach, 1982). These evaluation questions formed the organizing framework for the study.

5.Specifying each evaluation question.

For each evaluation question, the committee outlined the nature and detail of information needed to answer that question (Hagen, 1979; Worthen, 1981). Consideration was again given to meeting the decision-making needs of the program and providing information that would be credible to the audiences of the report.

Also, at this stage of planning, the group was directed to state, as specifically as possible, the criteria which would be used by the faculty as a basis for change. For example, an evaluation question could be: what factors facilitate and/or block the students' learning of psychomotor skills? Would the criteria for change be 80%, 50%, or 20% of the students expressing dissatifaction with certain teaching methods? Would student opinion be used at all, or only faculty views? Consideration of such criteria would assist the group in the subsequent planning of a methodological approach to each question. For the evaluation to be meaningful, the study must go beyond simply describing what is to making judgments of worth

(Worthen & Sanders, 1973, p. 38). Outlining criteria of change addressed this aspect of program evaluation. Program goals and objectives were reviewed as standards of performance.

Hagen suggests that in setting criteria such as these within a nursing program, the group should reach consensus оп each criteria, having given consideration to the characteristics of the students in the program, the complexity of performance embedded in the activity, and the amount of instructional time devoted to achieving competence (1979, pp. 57-58). Hagen also notes that using these criteria form the only framework for comparison of data that most nursing programs have available to them as a way of strengthening the research design of their evaluation studies. This comparative aspect of designing program evaluations is emphasized by some authors (Popham, 1975: Scriven, 1973).

6. Designing a methodological approach for each evaluation question: Cronbach's UNIT - TREATMENT - OPERATIONS - SETTING (UTOS).

Based on the nature and detail of information needed to answer a given evaluation question, the group decided on the best primary sources for this data. As a result, the target unit under study was described (Cronbach, 1982; Hagen, 1979; Worthen, 1981). Plans were made to incorporate any available information and/or currently used data collection procedures that related specifically to the selected evaluation question (Vaughn, 1979; Worthen, 1982). Thus, any existing evaluation

activities, or evaluation questions, could be incorporated into the development of this overall plan. The specific treatment under study, for example, learning activities or content, was then defined (Cronbach, 1982; Standards, 1981). Operations, that is, data collection procedures and tools, were subsequently determined.

Various authors in the literature make recommendations concerning the activity of determining operations. Some of these are: using a multi-method approach to collecting data related to a given area (Scriven, 1973; Tyler, 1949); examining student products, such as Health Care Plans (Hagen, 1979); using structured interviews with students to assess their perception of the connection between theory courses and clinical application (Eisner, 1981, p. 44); using classroom or clinical observation techniques to reveal unintended outcomes or the degree of fidelity in curriculum implementation (Webster, 1981, p. 51); collecting personal reports to give the audience "vicarious participation" in the program (Stake, 1981, p. 32); reviewing self-evaluation reports by student and faculty (Wilhelm, 1967); and assessing teacher effectiveness (Popham. 1975; Scriven, 1973). The pros and cons of various data collection methods outlined by Metfessel and Michael (1973) were selected by the researcher as a reference to be used when applying this aspect of the procedure.

Other caveats evident in the literature pertaining to the selection of data collection procedures are: plan to collect both qualitative and quantitative data (Eisner, 1979); consider

using more than one data source for each question (Cronbach, 1982): consider what kind of information will be credible with the audience (Worthen, 1981, p. 70); plan to minimize disruption of the natural processes of the program (Eisner, 1979); consider the constraints of time, budget, staff and the availability of participants and data (Standards, 1981, p. 52); and insure the procedure will yield data that most closely fits the informational needs of the program and the defined criteria. This may be a shortcoming of a standardized instrument (Buros, 1977). Also, any research study must consider the rights of the subjects involved for anonymity and confidentiality (Bailey, 1978, chap. 17). It was also a policy of the college involved. The outcome of incorporating these considerations would be the selection of time efficient procedures that collect valid, reliable and credible data as a basis for decision making. (See Appendix D for the summary of this methodological approach which was used in field testing the procedure).

The setting described the context in which data were collected for each evaluation question. It also described factors in the local situation or organizational characteristics which had an immediate influence on the object of study (Gronbach, 1982, p. 82). Such information would give the evaluation findings the appropriate context for judging effectiveness (Standards, 1981, p. 104).

A time dimension for all the evaluation questions was then done. Cronbach suggests breaking the evaluation plan into comparatively small self-contained studies with different

central questions, and varying starting dates and durations (1982, p. 241). Most programs would have a multi-year plan of evaluation atudies (Cronbach, 1982; Lewy, 1981). Hagen notes that questions concerning the development of student competencies in nursing programs should be collected no more than four times during the duration of the program (1979, p. 71). Other practical aspects which were discussed concerning planning the time dimensions of the study were the consideration of when certain information would be most useful to the faculty and also, when certain information would be required for any concurrent institutional five year planning. Timelines were made realistically considering the limits of the resources available and the workload of faculty. The outcome of this stage of the procedure was a timeplan with deadlines for answering and reporting on each evaluation question.

Finally, resources were allocated, including the designation of one person to be responsible for the completion of an evaluation question. The budgeting of resources also included a discussion on soliciting volunteer help for clerical or data tabulation tasks to save faculty time. Suggestions were made to use computer scanning sheets or cards when initially collecting data. This would save time in compiling and describing findings. Cronbach notes that it is always wise when allocating resources to plan, if possible, for a small reserve to deal with unanticipated results or with new important issues that may arise during the course of the study (1982, p. 239).

The methodological approach to an evaluation question is

summarized in figure 3.

Writing an Evaluation Report

The use of evaluation questions as the organizing framework for an evaluation study can also facilitate the reporting of the evaluation findings. Certain authors make recommendations which would be helpful to nursing faculty concerning the writing of an evaluation report.

Cronbach reminds the writers of an evaluation report to use language that the audience, or decision makers. will understand (1982, chap. 10). Worthen recommends providing an introduction to the report which includes: a brief description of the curriculum, the philosophy of evaluation espoused, the purpose of the study, the intended audience(s) and a brief overview of the report (1981, p. 87). Also, he mentions listing the selected evaluative questions which were used to guide the study. A brief description of the process used to select or omit evaluation questions could also be included. The program picture would give an overall schematic view of the major components of the program. An outline depicting the overall evaluation plan with central questions, the UTOS for each question, the timeline, and the resources allocated for each question could also be presented in the introduction.

Bonnet suggests organizing the information included in an evaluation report in such a way that, after an overall introduction, each central question is used to form a segment or chapter

FIGURE 3

SUMMARY OF A METHODOLOGICAL APPROACH TO EVALUATION QUESTIONS

PART 1: SPECIFYING THE QUESTION

(i)Statement of the question - "What factors facilitate and/or block.....

(ii) Information needed to answer the question.

(iii)Information relevant to decision making.

(iv)Information credible to audiences of report.

(v)Criteria for change.

PART 2: DETERMINING UTOS AND TIMELINE

(vi)Unit of study.

(vii)Treatment (process/thing under study).

(viii)Operations (instruments, procedures).

(ix)Setting.

(x)Timeline: Consider both departmental and institutional planning needs.

Person responsible.....

Date information needed.....

Date instruments done.....

When data collected.....

Date report written.....

of the report. Each of these segments would include a statement of the evaluation question followed by a short answer to that question. This answer would include the recommendations made, the substantiating evidence, and a discussion of the findings (1981, p. 21). The written summary of each central question is thus prepared as a small independent evaluation study which can be subsequently collated into a larger report, if this is desired by the faculty.

In planning the format to be used in the written report, the main focus of the evaluation study should be remembered - that of facilitating the decision making of the intended audiences.

Summary

The philosophical biases of the group planning the program evaluation will be openly stated at the onset if the planning process begins with a review of the program philosophy. There should be congruence between the philosophical statements which directed the development of the curriculum and those which direct the nature of the evaluation plan.

Because the resources available within a nursing program for program evaluation are ultimately finite, it is most practical to focus evaluation efforts on the most important decisions to be made within the program. Selection of these decisions is most justifiable if consideration is given to the following five categories of information: the educational variables perceived to comprise the program, the intended outcomes, the most important issues or problems affecting the program, the unintentional

outcomes, and the views held by influential program critics.

The results of the evaluation will be most credible if consideration is given, in the designing of the plan, to the intended audiences, or readers, of the report. Data should be collected that meet the informational or decision-making needs of these audiences.

Each nursing program will develop a unique evaluation plan, depending on the expressed values of the program, the stage of curriculum development, and the institutional variables. Relating the evaluation questions asked to the most important decisions to be made will provide the most useful information to the program. Using selected central evaluations to coordinate existing and future evaluation endeavors provides for the systematic planning, implementation, and reporting of a program evaluation.

Chapter IV

VALIDATION OF THE REVISED PROCEDURE

The last of the four research questions posed was: would a procedural approach to planning educational evaluation be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program? To assess faculty response to the revised procedure described in the previous chapter, further field testing was implemented.

In this chapter, the sample used in the field testing is described. Next, the four major steps involved in the methodology employed by the researcher are outlined. These steps are: collecting recent qualitative data about the program, orienting the committee of faculty volunteers, meeting twice with this committee to apply the procedure in developing a simulated evaluation plan, and lastly, measuring their response to its use.

Field Testing the Revised Procedure

Sample

The same college-based diploma nursing program involved in the preliminary field testing of the draft procedure was used in validating the revised version. The researcher, a full-time faculty member of that department, was at this time on educational leave from the college. The initial contact to solicit agreement to participate in the study was made with the Director of the Nursing Programs at the college (See Appendix E for the Proposal to Implement Research on Program Evaluation in Nursing Education).

The faculty involved in field testing the procedure taught in a two year diploma nursing program which prepares graduates for eligibility to write the Registered Nurse exams in British Columbia. Eighty-four students are admitted each fall into the Students who continue into the second year of the first year. program are called second year basic students. The program also allows access of Licensed Practical Nurses and Registered Pyschiatric Nurses into the second year, through a process of challenge exams, prerequisite work experience and credential review. Typically, 45 Licensed Practical Nurses (Access I II students) and 35 Registered Pyschiatric Nurses (Access students) are admitted each year. The three groups of second year students are integrated for classroom and clinical learning experiences. Faculty generally move between teaching in the first and the second year of the program.

The members of the committee who applied the procedure to developing a simulated evaluation plan for their program were volunteers. There were six nursing faculty members, the Director of the Nursing Programs, and one representative from the Advisory Committee of the program. In soliciting volunteers for this study, the researcher suggested to the group that such a committee have the following composition: administrative

representation by the director of the nursing program; faculty representatives from the different nursing apecialty areas, for example, Medical-Surgical Nursing and Obstetrical Nursing; faculty with experience teaching in different semesters and years of the program; and a representative from the Advisory Committee. This would give a broad perspective on the issues discussed and help neutralize biases from any one segment (Bonnet, 1981).

Table 1 gives a detailed description of the background experience of the actual committee members. One of the faculty members was also a graduate of the program. Because of the time involved in field testing the procedure, the researcher decided not to solicit student volunteers on the committee even though their involvement would be preferred in an actual application.

Methodology

The second field testing of the revised prodecure involved four major activities on the part of the researcher: collecting some recent data about the program, orienting the volunteer faculty participants to the nature of their involvement, meeting twice with this committee to apply the procedure in developing a simulated evaluation plan, and lastly, evaluating their response to using the procedure.

1. Collecting program information. The first step designated in the procedure was to collect specific categories

NURSING SPECIALTY	EDUCATIONAL BACKGROUND	YEARS EXPERIENCE IN NURSING EDUCATION	RESEARCH/STATS COURSES DONE	EXPERIENCE IN PROGRAM EVALUATION
Psychiatry	BSN, MS	10	two undergrad, two graduate level.	main responsibility for two major research projects; numerous surveys; dept. program evaluation committee for 7 years.
Administ- ration	BSN, MSN.	25	two undergrad (design&stats)	used experimental design for masters thesis; many question- naires, surveys.
Medical- Surgical	BSN, MEd.	20	two undergrad, two graduate level.	questionnaires; data collection and analysis related to program evaluation in nursing education.
Medical- Surgical	BSN	ы	two undergrad.	very limited.
Medical- Surgical	BSN	412	two undergrad, one graduate level (program planning & eval'n	none
4edical- Surgical	BSN	Q	none	none
)bstetric- Medical	BSN	11	one undergrad.	none
Jbstetric- Surgical	BSN,MSN (in progress)	15	one undergrad, three graduate level.	descriptive study for masters thesis; participated in many descriptive studies-questionnaires data collection & analysis; dept. program evaluation ctte 5 years.

PROFILE OF STEERING COMMITTEE MEMBERS

of data about the program for use as the informational base in the subsequent development of the evaluation plan. The researcher assumed responsibility for this task. In collecting recent information about the program, different data sources were used. Qualitative data were collected by using open-ended questionnaires. Also, written materials that had been recently ratified by the faculty for use in the newly revised curriculum were obtained. Published policy statements of the RNABC were another source of information.

The qualitative surveys were done by the researcher in the month immediately preceding the first meeting of the committee. The categories of information addressed in these surveys were the intended outcomes of the program or the factors which facilitated learning, the unintended program outcomes, the views of critics, and important issues or problems program affecting the program. Open-ended questionnaires were used to collect data from the following groups: first year students, second year basic students, second year Access I, second year Access II students, faculty, and the head nurses from the clinical agencies used for student experiences (see Appendix F for questionnaires).

Twenty names were randomly selected from the 72 students currently in the first year class, using student numbers as the basis for selection. The response rate was 100% of the sample. Twenty of the 56 second year basic students were randomly selected for sampling. Of these, 12 completed the question-

naires, a response rate of 60%. Sixteen names were selected for the sample from the 28 second year Access I students (LPNs) with a response rate of 75%. All 16 second year Access II students (RPNs) were asked to voluntarily complete the questionnaire. Nine participated, a response rate of 56%. In preparing the results of the students' questionnaires for review by the committee, the data from each of the three kinds of second year students was kept distinct.

All 27 instructors teaching in the spring semester, 1984, were included in the sampling of faculty. Of these, 15 completed the questionnaire, a response rate of 56%.

The 17 head nurses involved in the student clinical experiences in the spring semester, 1984, were included in the sample of agency staff. Five completed the questionnaire, a response rate of 29%. The relatively low response rate of the head nurses was attributed to the method selected by the researcher for distribution of the questionnaires. Faculty were asked to deliver and collect the questionnaires from the clinical areas. Although the purpose of the exercise waa explained to faculty, many reported difficulty in explaining the purpose of the survey to the head nurses. Also, two head nurses commented on the questionnaire that the wording was vague and confusing. However, the nature of the responses made by the head nurses on the questionnaires returned was typical of the comments usually made in routine evaluations of the clinical placements.

The summaries of the responses made on the open-ended questionnaires used to collect program information validated that

students, faculty, and agency staff did indeed have different perspectives of the program.

In reporting the results of the program information questionnaires, the researcher organized the raw data into the main topic areas which seemed to arise logically from the nature of the responses. The detailed comments made by the respondents were listed under each topic area. The total number of responses made for a main topic area was indicated, as well as the number of times each detailed comment was made. Bar graphs indicating the frequency with which these main topic areas were mentioned by the different groups surveyed, that is, first year students, second year students, faculty, and head nurses, were included in the report. Appendix G contains examples of the qualitative data collected about the program.*

The researcher deliberately did not label the responses as positive or negative. It was felt that it was more appropriate for the committee members to do this task as they reviewed the data in preparation for the meeting. In the report, the researcher explained that the purpose of summarizing the data into natural categories was to indicate major topic areas that could possibly be investigated more thoroughly as part of their plan to evaluate the program. The decision to pursue further evaluation of one of these areas would be their decision, after

The 50 page report of data collected in the qualitative surveys is available, on request, from the researcher.

reviewing all of the designated five general categories of program information.

The members were given directions in their orientation packet to write down possible decisions they felt should be made about their program as they were reviewing the data.

The most important trends in health care and recent changes in nursing practice affecting nursing education, identified in the November 1983 position paper of the RNABC Board of Directors, were also used in the category of important issues or problems affecting the program.

The written program philosophy describing the views of the faculty regarding the Nature of Man, Nursing, Health, Teaching -Learning, and Nursing Education was collected for use as a statement of the philosophical basis of the evaluation plan. These philosophical statements were also a data source in helping the committee describe the major variables operating within the program, that is, the program picture.

The overall objectives of the curriculum were obtained for use in designating the intended outcomes of the program. Also included in this category were the data collected by the open-ended questionnaires with first year and second year students relating to factors within the program which they perceived as most facilitating of their learning.

2. Orienting the members of the committee. The researcher held a brief orientation meeting for the volunteer participants

two weeks prior to their first committee meeting. A verbal overview of the procedure was given and an explanation of the nature of their involvement in the research. In addition, they were given a packet of reading materials to review in preparation for the first meeting (see Appendix H). Directions were given in the packet to relate the review of specific material to subsequent planning activities which would be done in the meetings.

The reading packet circulated to the members included the information that the researcher had collected about the program as well as the schematic overview of the procedure as depicted in figure 1. The data and written materials were organized into sections labelled with the five categories of information designated by the procedure.

3. Meeting with the Steering Committee. Through the formation of a simulated Program Evaluation Steering Committee, the group of nursing faculty, with the assistance of the researcher, worked through the process of applying the revised procedure to developing an evaluation plan for their nursing program. The committee met for two four-hour sessions, spaced ten days apart. The format used in the meetings was like that of the researcher conducting a workshop on program evaluation. The researcher distributed reading materials, set the agendas, and led the group discussions.

At the first meeting, the committee worked through the first three stages of the procedure (see Figure 1). After a

brief introduction to the topic of program evaluation, the schematic overview of the proposed procedure was reviewed with the committee members. The purpose of their involvement in the field testing was also reviewed, that is, after using their analysis of the five categories of data collected about their program as the basis for developing a simulated evaluation plan, they would state their impressions of the feasibility and importance of using this procedural approach. The definition of program evaluation used in developing the procedure was given to the members. The committee then worked through an application of the first three steps in the procedure.

Firstly, for use as visual cues during the discussions, the researcher posted summaries of the data pertaining to the following categories of information:

- * the program picture
- * summarized issues or problems
- * intended outcomes
- summarized views of program critics
- * summarized unintentional outcomes.

They also had available their copy of the detailed report on the data.

The meeting then proceded through the following series of planning activities:

(i) validating the use of the statements of program philosophy as the philosophical basis of the plan. Eisner's five orientations to curriculum (1979) were used to clarify the major thrusts of these statements. (ii) validating the appropriateness of the draft program picture previously done by their faculty.

(iii) clarifying any questions they had regarding the qualitative data.

(iv) devising the most important decisions to be made about the program. The committee broke down into four smaller groups of two to three members and used a brain-storming technique for 25 minutes to compile this list. The decisions proposed by each of the groups were posted for a total committee review.

(v) using the decision-rating scale, members individually assigned a numerical score to each decision.

(vi) collecting scores from individual members for tallying. The proposed decisions were then rank ordered based on the totalled numerical scores.

(vii) designating decision makers for the top-ranked decisions.

(viii) indicating the major purposes of the evaluation study.

A questionnaire measuring the perceived feasibility and importance of the first three steps in the procedure was given to the committee members at the end of the meeting (see Appendix I).

The committee met for a second and final time ten days after the first meeting. At the second meeting, one evaluation question was devised as a prototype example, and used to apply the remaining three stages of the procedure. There was also a brief discussion on writing an evaluation report. At the beginning of this session, charts showing the rank-ordered list of decisions, designated decision makers, and the purpose of the study were posted for the committee to see. A brief review of the group's work related to the application of the first three steps in the procedure was also done. One evaluation question was then devised and used as a prototype example in applying the last three steps in the procedure. A written summary of the proposed methodological approach to an evaluation question had been prepared by the researcher for use as a guide for committee members (see Appendix D).

posted the results of the committee's The researcher diacussion related to each of the steps in the methodological approach. Thus, the logical flow of ideas from one planning activity to the next could be visually apparent to all members. Five reference articles relevant to these steps in the procedure were made available for the committee as optional further reading. These were from Metfessel and Michael (1973, cited in Worthen Sanders pp. 274-279 and pp. 286-287) concerning multiple 2 criterion measures for the evaluation of school programs and some methods for collecting evaluation data; from Cook and Campbell (1979, pp. 41-44, pp. 51-55, pp.64-68, and pp. 73-74) concerning threats to the validity of their study; from a NLN publication (1979) concerning the reliability of achievement tests; from Martin (1977) the development use of classroom on and observation instruments; and lastly, a summary from the literature prepared by the researcher about writing an evaluation report.

A second questionnaire measuring the perceived feasibility and importance of the last three steps in the procedure was given to the members at the end of the meeting (see Appendix J).

4. Evaluating the process. At the end of each of the two meetings of the Steering Committee, members were asked to indicate their perceptions concerning the use of the proposed procedure in developing an evaluation plan. Two parameters were used to describe these perceptions: feasibility and importance to developing an evaluation plan.

FEASIBILITY was defined as ... capable of being put into effect, workable, suitable for use.

IMPORTANCE was defined as ... critical, valued, essential.

Specifically, the following components of the procedure were addressed in the questionnaires soliciting the opinions of the Steering Committee members:

(i) the use of the qualitative surveys to collect program information PRIOR to the first meeting of the committee.

(ii) the use of the program philosophy as the philosophical basis for the evaluation plan and as a reference point in describing the program.

(iii) the use of the five categories of program information as a basis for suggesting possible program decisions.

(iv) the use of the decision-rating scale in selecting and rank ordering decisions.

(v) the method used to specify the informational needs of an evaluation question.

(vi) the methodological approach suggested for each evaluation question.

(vii) the use of central questions as the organizing framework for an internal evaluation plan.

(viii) general comments about the procedure.

A five point Likert scale of agreement or disagreement was used to assess perceived importance and feasibility of the various steps proposed in the procedure. The following example illustrates how the scale was constructed:

"Using central questions as the organizing framework for the plan to evaluate a nursing program would be:"

X	STRONGLY	*		:	STRONGLY
x	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT	1			4	5
COMMENTS	5:				

If members strongly disagreed that a given step was important to developing an evaluation plan, a value of 1 would be indicated. If they strongly agreed to its importance, a value of 5 would be given. Only one value was to be assigned for each scale. Space was also provided with each rating of importance and feasibility for further comments.

Chapter V

RESULTS OF FIELD TESTING THE PROCEDURE

At the beginning of this chapter, there is a list of the general comments about the procedure made on the questionnaires by the nursing faculty who used it to develop a simulated evaluation plan for their program. Next, the ratings of importance and feasibility for each step in the procedure are presented, using the format of the questionnaires themselves to organize the data. The results are then discussed.

General Comments by Respondents About the Procedure

The overall response of the committee to the proposed procedure, both in the meetings and on the questionnaires, was generally positive. There were also aspects of the procedure which they suggested could be improved. General comments about the overall approach, which were solicited from the members at the end of the second importance and feasibility questionnaire, were as follows:

+ the step-by-step approach insured that all aspects of the procedure were addressed. Provided us with structure, and enabled us to focus on the question.

• procedure is time-consuming at first, but I believe that a given group would become quite proficient at using it after two or three plans were carried out.

* a logical and organized way to approach program evaluation (3 comments).

* factors which contributed to feelings of "userfriendliness" toward the procedure were my inexperience with evaluating programs, therefore no biases toward other methods of program evaluation; and the opportunity to apply it to our program, rather than theoretically.

* helped to narrow or focus the scope of the study and kept us on track (3 comments).

 based on current knowledge and flexible regarding the purpose of evaluation.

* procedure systematically guides decision making and involves the evaluators in the development of a plan that is specific to their needs.

 it requires a philosophical statement and draws attention to institutional values which should be the basis for judging process and outcomes.

* requires considerable thinking and a rationale for the evaluation to be established prior to implementing the plan.

* I think this approach would be very effective in planning a program evaluation.

* appears valuable as a way to get at the "hidden curriculum" and its effect on the learners and perhaps faculty.

Factors noted by the committee members to consider prior to subsequent applications of the procedure were:

* the procedure would need an effective group facilitator with a good background and understanding of the theory of

program evaluation to guide a faculty group through this approach. Perhaps specific guidelines could be written up.

* the difficulty experienced with the use of decisionrating scale and criteria headings could be alleviated by avoiding jargon or the use of vague terms.

• I don't know if I would have felt the same towards the procedure if someone less knowledgeable about our program (than the researcher) was attempting to help us apply it.

* It probably requires some selling to any faculty group, particularily if they believe they already know "how to" or "what to" evaluate.

• There may be some notion of threat in the preliminary collection of data, unless all participants are fully informed of the purpose and process. Budgeting for the evaluation would necessarily include this initial data gathering.

Detailed Responses from the Questionnaires

The ratings given by the faculty volunteers on the steering committee are presented using the format of Importance and Feasibility questionnaires. Below each scale of importance and feasibility, there is a notation of the number of times a given rating was made. There is also a list of any comments made by individual members to each statement. If no additional comments were made by the respondents to a given question, that section is omitted in the report.

(A) SURVEYING OPINIONS

Regarding program evaluation planning:

1. Using open-ended questionnaires to survey opinions of the FOUR categories of nursing students in our program was:

	STRONGLY			9	TRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT.				4	
number of		ļ			•
responses (n=	8)	1	1	З -	3

RESPONDENTS COMMENTS:

important to survey all four categories to compare results,
 because of backgrounds, results are somewhat different - we
 need to tailor our program to meet specific groups' needs as
 much as possible (2 comments).

* questionnaire format let them comment on the areas that sprung to mind first, or freely express their ideas (4 comments).

* students' knowledge of what constitutes a program appears to be limited to curriculum, therefore responses outside of pure curriculum issues were limited.

* limitation of this method is the uncontrollable variableinterpretation of the question.

* excellent opportunity to distinguish between what students consider important and not what we think is important.

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b) FEASIBLE.		2		4	5
number of			1	1	1
responses (n	=8)	1	1	4	2

RESPONDENTS COMMENTS:

* hard to comment on this, depends under which circumstances students were to answer, for example, all first year attended whereas second year self-selected as evidenced by lower response rate.

it must be very hard to categorize some of the data.
format of the questionnaire could have listed categories
under which to write things.

* if we had focused the students' responses into various categories, it would be difficult to ascertain which category of response was most important in the students' mind. By asking them to focus on issues in general, it may be that the most pressing issues for students revolve around the curriculum, even though it is only one part of the program picture. * could followup with a closed-ended questionnaire with a rating scale to ensure that as much relevant data as possible is gathered. Students may not be aware of some areas of program evaluation and may need additional direction for this reason. * requires time-consuming content analysis but the results should be valuable. Available computor software would assist in this task.

* students appeared pleased to participate.

2. Using an open-ended questionnaire to survey faculty

opinions was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT.....12.....3....4....5number of|||responses (n=8)134

RESPONDENTS COMMENTS:

* widely varying responses would indicate need for more specific probes or questions.

* faculty have a broader knowledge of the components of a program (than students) which would lend reliability to their responses.

STRONGLY STRONGLY DISAGREE DISAGREE NEUTRAL AGREE AGREE (b)FEASIBLE.....1.... .3.....5 2. number of responses (n=8) 1 1 2 4

RESPONDENTS COMMENTS:

* appropriate format for this group because they are familiar with the program and the major areas of evaluation.

* probably a good deal of preparatory work needs to be done to assure faculty of anonymity, importance of project, help them see it as "their" concern rather than an administrative or "outsiders" task.
3. Using an open-ended questionnaire to survey opinions of head nurses in clinical agencies was:

RESPONDENTS COMMENTS:

* necessary to get viewpoint of employers because they are a part of the consumer group for your system output

(2 comments).

* client/patient input is another possible source.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE....124number of124

no rating given - 1

RESPONDENTS COMMENTS:

* you might expect this group to have a narrower frame of reference in relation to the students and the program. It would be interesting to compare this data with that of the client/patient.

* this tool not the most appropriate with head nurses, that is, the time to complete it and need to clarify the intent of the questions (5 comments). (B) USE OF THE PROGRAM PHILOSOPHY

Regarding program evaluation planning:

4. Use of the stated program philosophy as the philosophical basis of the plan was:

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT		2		4.	
number of			ł	1	í I
responses (n	=8)		1.	3	4

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a)FEASIBLE.		2		4	
number of				ł	1
responses (n	=8)			4	4

RESPONDENTS COMMENTS:

* this exercise would be limited or enhanced by the quality and detail of the philosophical statements (3 comments).
* it would be important for these statements to be up-to-date. 5. Using the stated program philosophy to elicit the main concepts and their interrelationships (draw the program picture) was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT....12.....23.....4....5number of|||responses (n=8)152

RESPONDENTS COMMENTS:

* may also need other data such as a conceptual framework and description.

* I can't imagine what else could be used.

* to a point, the theory was a good idea, but without prior knowledge of the reasons for selecting and arranging the concepts, it was confusing and hard to grasp.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE....12345number of||||responses (n=8)152

RESPONDENTS COMMENTS:

* the philosophy easily lent itself to creating a clear picture of how all the main concepts are related and interrelated.

* possible to do, however, there was quite an overlap in some areas - it was clear to us who drew the picture, but not to others why we put certain things in one area and not in another. * takes a good deal of time to get everyone in the same headspace.

* as a member of a planning committee, I would need input into the decision-making which arranged the component parts of the picture.

(C) DATA SOURCES

Regarding program evaluation planning:

6. Using the program picture to assist in eliciting decisions to be made about the program was:

STRONGLY STRONGLY DISAGREE DISAGREE NEUTRAL AGREE AGREE (a) IMPORTANT....1. ..5 number of Ł 2 responses (n=8) 1 1 4

RESPONDENTS COMMENTS:

• development of this picture was crucial to appreciating the largeness and complexity of the program.

* as a reference source, it shows how all decisions are

interrelated.

* not being involved in its development, I couldn't do this. Discussion helped only slightly.

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBILE.	1	2		4	
number of	1			1	1
responses (n=8	3) 1			5	2

RESPONDENTS COMMENTS:

* having participated in developing the picture made it clear and comprehensive.

* each nursing program has a philosophy which can be transformed into a program picture with a lot of work.

7. Using the summary of important issues or problems from the surveys to elicit decisions to be made about the program was:

STRONGLY				STRONGLY
DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT1	2		4 .	
number of			ł	· · · · · · · · · · · · · · · · · · ·
responses (n=8)	1		1	6

STRONGLY				STRONGLY
DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE1				5
number of	L	1	ł	1
responses (n=8)	1	1	1	5

8. Using the summary of issues presented in the RNABC position paper to assist in eliciting decisions was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT.....1234number of111responses (n=8)142

no rating given - 1

RESPONDENTS COMMENTS:

* RNABC position paper provided a perspective broader than one local situation.

* (selection of this paper) clarified where the researcher personally stood.

* positions represent those of our official body.

no rating given - 1

RESPONDENTS COMMENTS:

* position paper readily available and prepared by respected colleagues.

9. Using the program objectives (intended outcomes) to assist in eliciting decisions was:

	STRONGLY			S	TRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT.	1	2		4	
number of		t		1	1
responses (n=8	3)	1		1	5

no rating given - 1

RESPONDENTS COMMENTS:

* provides an opportunity to review these objectives in terms of what we are actually accomplishing versus what we intend to achieve.

* perhaps a more important point of reference is whether the graduates are achieving these objectives.

S	TRONGLY				STRONGLY
D	ISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE	1	2	3	4	
number of		1		I	i i i
responses (n=8	>	1		1	-5

no rating given - 1

RESPONDENTS COMMENTS:

* all nursing programs have objectives that can be used.
* I feel our objectives are reflective of actual not ideal objectives.

10. Using the summary of perceived views of program critics to assist in eliciting decisions was:

:	STRONGLY			STF	RONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT	1	2	3	4	5
number of				· •	1
responses (n=8)			1	3	3

no rating given - 1

RESPONDENTS COMMENTS:

* are critics really familiar with the program?

* we should consider negative views of our program when planning to evaluate it.

* question whether critics views, as reported by faculty and head nurses, are any different than their own views.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE....1234number of|||responses (n=8)331

no rating given - 1

RESPONDENTS COMMENTS:

* there are always critics of any program.

11. Using the summary of unintentional outcomes to assist in eliciting decisions was:

STRONGLY			ສ	TRONGLY
DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT1			4	
number of	1		1	1
responses (n=8)	1	2	1	3

no rating given - 1

RESPONDENTS COMMENTS:

* some theorists maintain that the unintentional curriculum is as important as the planned curriculum.

* are these things we can really do anything about?

(2 comments).

* sometimes teachers do not realize what students do with our expectations.

STRONGLY				STRONGLY
DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE1				
númber of		· •	1	1
responses (n=8)		ż	3	2

no rating given -1

12. Using these five categories of program information to assist in eliciting decisions to be made about the program was:

STRONGLY STRONGLY DISAGREE DISAGREE NEUTRAL AGREE AGREE
(a)IMPORTANT.....1.....2.....3......4......5
number of | | |
responses (n=8) 3 4

no rating given -1

RESPONDENTS COMMENTS:

* provided a comprehensive data base (2 comments).

* distinguishing responses from the questionnaires as positive or negative under each category would have increased the reliability of the decision selection.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE.....1.....2.....3.....4number of||responses (n=8)34

no rating given -1

RESPONDENTS COMMENTS:

* examination of philosophy possible, other categories using questionnaire format a lot of work but simpler than interviewing and probably elicited more honest responses.

(C) DECISION MAKING

Regarding program evaluation planning:

13. Using the decision-rating scale to assist in the selection and rank ordering of decisions about the program was:

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT	1	2	3	4	5
number of	1			1	1
responses (n=8) 1	1		3	З

RESPONDENTS COMMENTS:

* meaning of the criteria in the scale unclear and therefore not helpful at the present stage of development.

* need to clarify, on the instrument itself, the meaning of
each of the criterion and the meaning underlying the
assignment of a given rating for each criterion (4 comments).
* scale too haphazard and subjective; directions so unclear,
different interpretations were given by members to the
ratings of the scale.

 overall scale of 1 - 5 of relative importance to evaluating the program did not seem to fit every criterion.

	STRONGLY			:	STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE.			3	4	5
number of	I		t		1
responses (n	.=8) 1	3	1		З

RESPONDENTS COMMENTS:

* more time needed to do this task (2 comments).

14. Determining who the decision makers would be for each decision was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT.....1234number of|||responses (n=8)114

no rating given -1

RESPONDENTS COMMENTS:

* this planning action would increase the credibility of the report, an aspect of program evaluation not previously considered (2 comments).

* administrative bodies have the final word anyway.

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE.	1	2		4	5
number of			1	1]
responses (n:	=8)		1	1	4

no rating given -1

(D) FOCUSING PURPOSE

Regarding program evaluation planning:

15. Using the list of rank ordered decisions to be made about the program to focus on the main purposes of the program evaluation was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT.....1234number of||responses (n=8)15

no rating given -2

RESPONDENTS COMMENTS:

* this step in the procedure does not seem to tie as directly to the other parts as did the previous steps.

	STRONGLY		STRONG			
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE	
(b)FEASIBLE.		2				
number of		1			1	
responses (n	(=8)	1			5	

no rating given - 2

RESPONDENTS COMMENTS:

* doing this seemed to bring the "elephant" (the huge, complex program) down to a mangeable size.

(E) SPECIFYING THE EVALUATION QUESTION

Regarding program evaluation planning:

15. Stating the question in terms of facilitating and blocking factors was:

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(a) IMPORTANT.....1234number of||responses (n=7)25

RESPONDENTS COMMENTS:

* very important as we continued to go back to the evaluation question as a point of reference in developing the rest of the plan.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE.....121nunber of||responses (n=7)25

RESPONDENTS COMMENTS:

* it is difficult being specific enough.

* would require a lot of time, especially with a large group.

16. Outlining the nature and detail of information needed to answer the evaluation question was:

 STRONGLY
 STRONGLY

 DISAGREE
 DISAGREE
 NEUTRAL
 AGREE
 AGREE

 (a) IMPORTANT.....1
2
3
4
5

 number of
 |
 |
 |
 |

 responses (n=7)
 1
 6

RESPONDENTS COMMENTS:

• points to questions of cost-effectiveness.

* enabled us to determine what we are really looking at, explore the questions and associated factors (2 comments).

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREE(b)FEASIBLE.....1AGREEAGREEnumber of||responses (n=7)16

RESPONDENTS COMMENTS:

* faculty should know what is presently available and what resources would be necessary to obtain information not presently available.

good to have input from people in other areas, for example,
 RNABC.

17. Specifying the criteria which would be used as a basis for change was:

RESPONDENTS COMMENTS:

* requires faculty to identify objectively their valuing of any one criterion (2 comments).

* really grounds you to whatever measure you would regard as representative of a needed change.

* very important for measurement purposes and to pursue validity.

* must be done to guide decision making; difficult

value-laden activity.

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE.		2	3	4	5
number of				4	ł
responses (n	=7)			ż	5

RESPONDENTS COMMENTS:

* may be hard to achieve consensus in a larger group.

* yes, each person on the committee had an idea of what criteria to use as a basis for change.

* this did not prove to be a difficult task.

* difficult to assign numbers to value-oriented material.

(F) DESIGNING A METHODOLOGICAL APPROACH

Regarding program evaluation planning:

18. Deciding on the UNIT, TREATMENT, OPERATIONS, and SETTING (UTOS) for the evaluation question was:

, ``	STRONGLY			9	TRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT.	1			4	5
number of					ţ
responses (n=)	7)			1	5

no rating given - 1

RESPONDENTS COMMENTS:

requires group to specify task, thereby making it mangeable(3 comments).

* provides structure and organizational framework prior to carrying out the study.

* focuses evaluation and forces decision making re instrument preparation.

	STRONGLY				STRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIB	LE1				
number of					
responses	(n=7)			2	4

no rating given -1

RESPONDENTS COMMENTS:

* this approach gives us a way of getting at the data to answer the evaluation question.

* [process of working through UTOS] not linear, but a working back and forth as the plan was developed.

19. Considering the list of author's views on OPERATIONS (data collection methods) was:

no rating given -1

RESPONDENTS COMMENTS:

* important as we want to have reliable, valid data as a result of using a reliable and valid system of collecting data (2 comments).

* gave us all the same starting point as a group.

* helps guide choice of instruments and determines group's values. that is, reliability and validity may be more important than the ease with which the instrument could be developed.

 STRONGLY
 STRONGLY

 DISAGREE
 DISAGREE
 NEUTRAL
 AGREE
 AGREE

 (b)FEASIBLE.....1
 1
 1
 1
 1

 number of
 1
 1
 1
 1

 responses (n=7)
 3
 3
 3

no rating given - 1

RESPONDENTS COMMENTS:

* summary format really nice, many people not aware of importance of choosing the best tool.

20. Setting a timeline and determining a coordinator for an evaluation question was:

no rating given -1

RESPONDENTS COMMENTS:

* part of implementing the plan and ensures responsibility and accountability for follow through.

STRONGLYSTRONGLYDISAGREEDISAGREENEUTRALAGREEAGREE(b)FEASIBLE.....1.....2.....3.....4.....5number ofresponses (n=7)15

no rating given -1

(G) USE OF CENTRAL QUESTIONS

Regarding program evaluation planning:

21. Using central questions as the organizing framework for the plan to evaluate a nursing program would be:

no rating given - 3

RESPONDENTS COMMENTS:

* as long as the questions came out of a reliable data base.

no rating given - 3

Discussion of Results

There were eight nursing faculty who attended the first meeting of the committee. All eight of these participants completed Part 1 of the Importance and Feasibility questionnaire.

The responses to the first step in the procedure, that of collecting the five categories of information about the program, indicated that this was an important and feasible step in planning an evaluation. There were some suggestions made on how to improve the methods of gathering gualitative data. Their comments indicated that using open-ended questionnaires was viewed as a desirable method of collecting qualitative data by some members and an undesirable method by others. The concerns that they had about this method, that is, the time and difficulty involved in summarizing or categorizing qualitative responses, cautious interpretation of the data because of the various possible meanings respondents could give to the questions asked, and the self-selection of respondents with strong feelings about the program when participation is voluntary, were valid ones to consider if this method is selected for use. In an actual application of the procedure, they would have the option of choosing their own preferred method. Open-ended questionnaires were seen as the most appropriate format for use with faculty, whereas it was recommended that interviews were preferable with agency staff. Incorporating the collection of such data into routine end-of-placement evaluations would be a

time-efficient approach.

The field testing revealed the importance of planning to do preparatory work with all participants in the data collection step of the procedure in order to elicit support for program evaluation activities and to provide some background information on the possible goals and roles of program evaluation. When the researcher asked the group in the meeting about the appropriateness of categorizing the qualitative data into responses, the opinions positive and negative were split evenly, that is 50% in favour and 50% opposed. This would be another planning decision in an actual application.

From the responses on the questionnaires, it seemed important and feasible to use the program philosophy both as the philosophical basis of an evaluation plan and as an aid to drawing the program picture. The conceptual framework could also be considered by a planning group for use in assisting with eliciting concepts for the picture.

Most members indicated agreement to the use of the program picture as a feasible and important part of the planning process. For expediency, the researcher used the picture previously done done by a group of faculty of the same nursing program in the preliminary field testing of the procedure. Given the expressed confusion of those members of the committee who did not participate in drawing the picture, it would be important in future applications that all members of a planning group be involved in its construction.

majority of the members agreed to the use ofThe the summary of important issues/problems collected by the open-ended questionnaires. The importance and feasibility of using the summary of issues presented in the RNABC position paper to assist in eliciting decisions was also agreed to most members. the field testing, the researcher selected this reference In In an actual planning situation, faculty might choose source. other data sources. One member did comment that the selection of the RNABC paper revealed the personal biases of the researcher.

Six of the eight members indicated agreement with both the feasibility and importance of reviewing the program objectives as intended outcomes. Using the summary of perceived views of program critics as an informational source in planning an evaluation study was as well agreed to by six members. In actual applications, the data sources for this category of information would vary with the preferences of different the summary of planning groups. The use of unintentional outcomes to assist in eliciting decisions was viewed positively by the majority of the members. However. two of the members questioned whether these are factors which teachers can really do something about, given that every program will There was some discussion about have unintentional outcomes. minimizing negative effects of a program.

In summary, the field testing revealed that the five categories of program information designated in the procedure were an appropriate base from which an evaluation plan could be

developed. The written comments indicated the importance of a given: planning group selecting their own preferred method of collecting these data as well as the data sources.

The design of the procedure was intended to allow for that flexibility. It would be important for subsequent planning groups to appreciate the intent of this data collection step in the procedure, that is, to identify areas that possibly need to be investigated more formally as part of an evaluation plan. It is not to be viewed as the final evaluation of that topic area.

The group stated that the process of suggesting possible program decisions was an important, yet time-consuming task. Even though they had two weeks in which to individually review the information that was collected about their program in relation to proposing possible decisions, they wanted more time at this activity as a group. They stated that because these decisions determined the ultimate focus of the evaluation plan, this activity should have had more time than the forty minutes allotted. Although the field testing involved developing a simulated evaluation plan, their comments indicated the relative importance they gave to this step in the procedure.

Using the decision-rating scale was difficult for the committee. Six members did however indicate agreement with the importance of using an instrument to assist in the process of rank ordering potential decisions. The difficulty was with the stage of development of the rating scale used in the field testing. Comments indicated that more specific directions for

its use were needed, with more detail provided as to the meaning of each criterion and the assignment of a given rating on each scale. The overall scale of 1 - 5 of relative importance to program planning did not seem to fit every criterion. The design of this instrument, as it was presented in the second field tesing, was indicated as the area most in need of revision prior to subsequent applications of the procedure in reality settings.

Both the importance and feasibility of determining who the decision makers would be was agreed to by five of the eight members. Two comments noted that this planning action could increase the credibility of the report, an aspect of program evaluation which they had not previously considered. The member who gave a neutral response to this question commented that administrative bodies have the final word anyway.

Although following through from the rank-ordered decisions and designated decision makers to defining the purposes of the evaluation was strongly agreed to as both important and feasible by five members, the researcher felt that this step did not add a new dimension to the planning. One of the members also commented that stating the purpose did not seem to tie as directly to the other parts as did the previous steps.

At the second meeting of the committee, the membership changed somewhat. The Director of the Nursing Programs and one of the instructors could not attend because of other unanticipated committments. Six of the original members re-

mained, and one new faculty representative joined the group.

One evaluation question was formulated by the group and used as a prototype example in applying the remaining steps of the procedure. A handout was done by the researcher to assist the group in applying these steps (see Appendix D). The question that the committee devised and followed through was: what factors facilitate and impede the students' ability to meet the clinical objectives of the program? All of the seven faculty who participated in this meeting completed Part II of the Feasibility and Importance questionnaire.

Stating the evaluation question in terms of facilitating and blocking factors was agreed to by all the members. All of them also indicated agreement to both the perceived importance and feasibility of outlining the nature and detail of information needed to answer the evaluation question and of specifying the criteria which would be used as a basis for change. Their comments recognized the difficulty involved in the value-laden activity of specifying criteria for change, but did note that it was a necessary planning activity which would later quide judgments of worth. When devising an actual evaluation plan, it would be important at this stage of planning to validate the criteria with the faculty at large. Discussion of these criteria for change would challenge the preconceived positions of individual members and indicate how the evaluative data should be interpreted. It would also indicate that the internal evaluation was intended to be more that a token effort.

The ratings and the comments made regarding the structured UTOS step in the procedure were all positive. One comment by a committee member would be particularily relevant to subsequent applications of the procedure. This was that the process of developing the unit, treatment, operations, and setting elements be seen not as a linear process, but rather as a working back and forth among the elements while developing the plan.

The responses of the members indicated their agreement to the importance and feasibility of setting a timeline and determining a coordinator for each question. Using central questions as the organizing framework for a plan to evaluate a nursing program was also viewed positively in the field testing.

The group made some verbal comments at the end of the second meeting of the committee which were also noted by the researcher as relevant feedback for any subsequent field testing of the procedure. The detailed handout which the committee members were given to use as a guide to specifying an evaluation question and developing the methodological approach to the question was seen as a better format of presentation than what was used for the decision-rating scale. This format was therefore used as the model for revising the decision-rating The group also commented that the method used scale. by the researcher to record their comments as the discussion progressed, facilitated their understanding of how to connect the concepts from one step to the next. (Their comments were written, for each step of the methodological approach, on large sheets of

paper which were posted for all to see.)

In conclusion, many committee members shared their impressions that evaluating a program could be an enormous, complex, and time-consuming task. Although they agreed that it was a valuable exercise, they reminded the researcher that, in reality, their involvement in program evaluation activities were added on to their present workload of teaching and curriculum planning. Focusing their efforts on facilitating decision making was considered to be an important, and feasible way of connecting these activities to both the management of the program and to the development of the curriculum.

Chapter VI

CONCLUSIONS AND RECOMMENDATIONS

The changes made in the final revised procedure are presented in this chapter, along with a summary of the views of the researcher regarding the subsequent use of this approach. Next, there is a discussion of the insights regarding internal program evaluation gained as a result of this experience. Lastly, recommendations are made for further research.

The Revised Procedure

Based on the experiences of the researcher in the second field testing, and on the data received on the Importance and Feasibility questionnaires which were completed by the faculty members of the steering committee, there were three major changes made in the final version of the procedure.

The first change was to omit the step of determining the purpose of the evaluation. The selection and rank ordering of decisions and determining the decision makers, the step which immediately preceded the statement of purpose, seemed to narrow the scope of the investigation sufficiently. Stating the purpose, in addition, appeared redundant. The researcher felt that it was important to reduce, if possible, the number of steps in the procedure in order to simplify the process and make it more timeefficient for the users.

recommendations were added regarding Secondly, the collection of qualitative data about the program. There were two reasons for designating the collection of qualitative data the procedure. These data form 85 the first step in an informational base for suggesting possible relevant decisions to be about the program and for rank ordering the made most important of these. The comments made by the committee members pointed out that more valuable data might have been collected if the respondents were given some background information about the possible roles and goals of program evaluation prior to completing the questionnaires. In the field testing it appeared that, without background information on program evaluation, the respondents focused their comments on the needs for program evaluation primarily on the curriculum.

This background information could be provided to participants by arranging an information session for those involved. Or, an introduction to any questionnaires used could mention the other possible roles that program evaluation could The general goals of evaluating a program mentioned by play. Love (1983), that is, advocating the value of the program in the community, providing data to assist in policy choices and selecting operating practices, and improving the quality of the program, could be listed. The program picture could also be used in an orientation to a broader perspective of possible areas to investigate.

The selection of data sources, the preparation of participants, and the methods selected to collect qualitative

data about the program must be decisions made by the faculty the evaluation. Recommendations 1 n subsequent planning applications of the procedure would specify that the faculty group responsible for developing the plan determine which methods and sources will be used to collect qualitative data. The criticisms of the data provided about their program, made by the committee in the second field testing, might have been avoided if the members had this involvement. As it was, the researcher assumed this responsibility in order to have recent and relevant data about the program to use in developing a plan. Whatever method is selected simulated for use, consideration should be given in the design of the instrument to the ease of tabulating and summarizing data for subsequent review by a committee. Also, the data that are collected must be immediately relevant to the five categories of information designated in the procedure.

The nature of the qualitative data collected in the field testing validated that students, faculty, and agency staff do indeed have different views of the program. Having a variety of data sources for these data, from both inside and outside the program, provided for a broader informational base from which to develop an evaluation plan. But, because of different background experiences, the method selected to collect data from the various informants may be different. For example, interviews rather than questionnaires, appear to be the method of choice for agency staff. Group interviews, like the ones described by Allen and Reidy (1971), could be done.

The third major change made in the procedure related to the format and the amount of detail provided in the decision-rating scale (see figure 2 for the original). This was done because of the confusion experienced by the committee in interpreting the meaning of each criterion itself and also the significance of a certain rating on the scale. A brief introduction outlining the purpose of the scale and general instructions for its use were added. Some of the criteria seemed to overlap, therefore the total number was reduced from nine to six.

In reducing the number of criteria used in the scale, those relating to the same general topic area were combined. The criteria of "timeliness of information to program planning", "the stage of curriculum development", and "future impact on the program" were combined to become one criterion, that of "timeliness of information to program improvement". "Available resources" was omitted entirely. This criterion seemed to apply more appropriately to the selection of a methodological approach than to the selection of an evaluation decision. The criterion of "value given by program critics" was incorporated under that of "political leverage" or the degree of anticipated response from the community. The criteria "student needs", "stated values of the program", and "degree of informational need" were retained. A new criterion, "impact on policy choices and operating decisions" was added to connect the evaluation

planning activities more directly to the administrative practices within the department.

Each criterion was also defined in more detail and operationalized by adding specific information about the program. Some of this program information would be provided by asking related questions when collecting the qualitative data about the program. A rating scale of 1 - 5 was provided for each criterion. Because each criterion addresses a unique aspect of the program, an explanation was given of the meaning of a "1" and a "5" rating on each scale. An adjoining summary sheet was devised for use in tallying individual scores (see Appendix K for the revised scale and summary sheet).

Summary

Initially nursing faculty would need some assistance in using the proposed procedure as a basis for planning an evaluation of their program. Because the procedure presented a structured and relatively simple approach to a complex task, it should have a high probability of being accepted by novice evaluators. The procedure addressed some important aspects of program evaluation which are noted in the literature. Because of this, application of the procedure would increase the theoretical knowledge of the users. As more and more nurses are educated to the Masters level, the research skills of faculty groups will also increase. Although the procedure included some components of planning the methodology of a study, the emphasis was on a

systematic approach to an overall plan. This proposal assumed that specific knowledge and skills related to research design and statistical analysis would be gained elsewhere.

The procedure presented in this thesis proposed one way to approach the systematic planning of an internal evaluation of a nursing program. Given the subjectivity inherent in the process of evaluating any phenomenon, other approaches are certainly possible. The important issue was that the unique philosophical biases of the faculty group were openly connected to the program evaluation activities. The field testing of this proposal in one diploma nursing program did indicate, however, that such an approach was perceived as both an important and feasible way to plan an internal evaluation.

Implications for Internal Program Evaluations

Anv educational program is a complex phenomenon whose unique learning experiences and outcomes result from the interaction among institutional. instructional, and student Because of constraints of time and resources, any variables. internal evaluation of a nursing program will ultimately have to focus on certain aspects of the program while ignoring others, regardless of the theoretical approach selected to guide the That there be some kind of a framework that provides process. for the logical and justifiable organization of time, effort, and resources is essential. The faculty and administration of college-based nursing programs are accountable to many different

groups for the quality of their programs. Therefore, the approach selected and the focus given to an evaluation must be justifiable to others outside the department, not only for what is selected for use, but also for what is rejected.

Evaluation activities must compete with other departmental responsibilities for the time and attention of both faculty and administration. Even with a systematic, structured approach to planning an evaluation, which specifically connects evaluation activities to decision-making needs, concentrated effort must be made to keep the acope of the study compatible with the ability of the people involved to manage such endeavours effectively. The design of the proposed procedure has the flexibility to allow faculty, at each step in the planning process, to make the nature of their activities as broad or as narrow aa is realistically possible. If evaluation activities are to be required of any college program, and are truly valued by fund givers, faculty will need release from their usual teaching and curriculum planning responsibilities to plan and implement an evaluation which will yield meaningful results.

When soliciting volunteers to participate in the field testing, the researcher felt resistance from the faculty toward becoming involved in this extra activity. The climate within the program at the time of the field testing was affected by the fact that major changes were planned for the program in the fall. The researcher had originally hoped to incorporate the field testing of the procedure into the actual program

evaluation activities of the department. However, planning had already been done, and to redo or change any aspect of these plans was not a realistic expectation to make of the faculty. Even though the researcher had many years of experience with the usual workload of a nursing instructor, being on full time leave of absence had made her too quickly forget the stresses of the work environment. Also, when a research project is one's primary focus, one somehow expects that all others will share the same level of enthusiasm and committment for such activities. This short-sightedness can alienate a researcher from the faculty group even when that person is a member of the department.

Although subjectivity is a salient feature of any evaluation, it becomes a particularily important issue when planning an internal evaluation. Beginning the planning process by having a group discussion of the entire faculty regarding whether their preconceived positions about the program are really open to be changed by evaluative data would be essential. At the least, this discussion acknowledges such a possibiliity. A positive view of the purposes of an internal evaluation should also be emphasized, for example, that the process is intended to improve the program for students.

Any evaluation will have the highest probability of having positive results if it is implemented within a climate of trust. Even though the planning of an internal evaluation is most efficient when done by a small group, whenever possible, information should be reported back to faculty-at-large and the
opportunity given to validate major components of the plan. Being informed and clearly understanding the purpose of the evaluation and who the intended audiences of the report shall be should promote trust. A positive and frank discussion on the topic may diffuse some of the emotional impact evaluation can have.

One of the advantages, perceived by the researcher, to planning an internal versus an external evaluation, was that the faculty would feel ownership for the process. Therefore, there would higher probability of them believing in the be а field evaluative data and making changes as a result. In testing the proposal. the researcher designed the data collection tools and collected and summarized the qualitative data about the program. This was done to reserve the time and effort of the volunteer participants for the application of the procedure. Also, being a member of this faculty, the researcher viewed herself as an insider to the program. But, because the group itself did not have input into this beginning step of the planning, there was much discussion on their acceptance of the validity and reliability of both the tools and the data. At the onset of the field experience, the data collection activities were viewed by the researcher as a relatively insignificant part of testing the procedure. But the expressed faculty opinion indicated that this step was indeed a very important one - it was a representation of their program. The researcher was not prepared for the emotional response of the group toward the data which had been collected about their program. It appears that

receiving evaluative data about one's program is comparable to receiving evaluative data about one's own performance, that is, it is a personal experience.

The faculty using the procedure must be involved in every aspect of the planning to feel ownership for it. They must feel comfortable with the data collected about their program or they may suspect that the outcomes of the plan will be biased by the nature of the informational base initially provided.

Preparatory work is essential to ensure the success of an internal evaluation. With the pressures of the timelines involved in completing the thesis, the researcher did not spend enough time explaining to individual faculty the purpose of the research and the possible benefits to the department. Although group information sessions were held, it appeared that more one-to-one communication should also have been planned. Such preparatory work is essential to gain cooperation and committment for evaluation endeavors.

Planning for input from outside the department involved is an essential aspect of an internal evaluation. Outside input can be ensured by selecting data sources external to the program when collecting information about the program. Also, having a member of the planning committee who is not a member of the nursing department would provide some measure of objectivity. External involvement in the process may also increase the credibility of the evaluation with the audience of the report. In career programs such as nursing, it is practical to include representation from potential employers of the graduates when

planning a program evaluation.

Program evaluation activities can be made more timeefficient if one overall approach to the task is generally accepted by the faculty group. Rather than exist as distinct functions, evaluation activities incorporated into can be normal routines of the department such as teaching team meetings and end-of-placement interviews with agency staff. Also. consideration should be given in the overall plan to addressing any concurrent evaluation criteria imposed by the demands for institutional self-evaluation and program approval.

An internal program evaluation is in essence а self-evaluation. There are those who are philosophically opposed to this approach because they feel that the process is biased from the onset and that the results are not to be trusted. There are also others who feel that it is only through self-evaluation that weaknesses and strengths can truly be identified. An introduction to an internal evaluation report should acknowledge the philosophical bias. Whether the faculty who implement an internal evaluation are completely honest in reporting problem areas is a critical factor. Perhaps, the ideal program evaluation involves the perspectives of both internal and external examiners.

Summary

The following insights into program evaluation were gained by the researcher as a result of the field experience:

(i) evaluating an educational program is an enormous and

complex task.

(ii) some kind of organizing framework is essential to make the task relevant, valid, and manageable.

(iii) whatever approach is adopted, the selection and the rejection of various options must be a rational process and justifiable to others.

(iv) evaluation activities must compete with other departmental responsibilities for the time and attention of faculty and administrators and for funding.

(v) when evaluative data about a program is presented to insiders, one should expect an emotional response.

(vi) program evaluation activities must take place in a climate of trust.

(vii) planning an internal evaluation must involve faculty in every aspect of the process. Preparatory work, in groups and in one-to-one sessions, is necessary to gain faculty cooperation and committment as well as to decrease defensiveness. Such preparatory time should be included in the plan.

(viii) internal evaluations should have input from outsiders. This action recognizes the political climate in which all educational programs exist, may increase the credibility of the evaluation, and gives a broader perspective.

(ix) program evaluation activities must be time-efficient and mainstreamed into normal departmental activities.

(x) internal program evaluation is a self-evaluation.

Recommendations

Further field testing of the proposed procedural approach to planning an internal evaluation is necessary. Both the initial and the second field tests were implemented within the same nursing program. Feedback from faculty groups of other programs could provide differing perspectives on both the importance and feasibility of using this approach. Ideally, further field testing should involve the development of an actual, rather than a simulated, evaluation plan. Feedback concerning the revised decision-rating scale would definitely be warranted.

If nurse educators are to take responsibility for planning and implementing evaluations of their programs, it is essential that significant numbers of them possess the necessary research skills. Inservice programs could be one method of achieving this goal or, incentives could be provided by program administrators for faculty to attend formal university-level courses.

Recognizing that there are many ways to approach the task of planning an internal program evaluation, it is expected that the comparison of the proposed procedural approach with other methods, even within the same program, would produce different However, it could be possible to establish some outcomes. criteria of comparison between approaches that would he meaningful to faculty users. For example, time-efficiency and simplicity in design could be such criteria. Surveys of nursing faculty could be done to establish criteria for comparing different approaches.

APPENDIX A

OUTLINE OF THE STEPS

USED IN IMPLEMENTING

THE SECOND FIELD TESTING OF THE PROCEDURE

Steps used in Implementing the Second Field Testing of the Procedure.

1. Soliciting permission from the Director of the Nursing Programs at the college to participate in the reaearch (March 11, 1984).

2. Collecting information about the program to use as a basis for developing the simulated evaluation plan (late March and early April, 1984).

(a) collecting and summarizing some specific and recent data about the program relating to four informational categories designated by the procedure; that is, intended outcomes (factors which facilitated learning), unintended outcomes, important issues/problems affecting the program, and views of program critics. Open-ended questionnaires were given by the researcher to the following groups of volunteer participants: first year students (n=20), second year basic students (n=12), second year Access II (n=9), second year Access I (n=14), faculty (n=15), and head nurses from clinical agencies hosting student experiences (n=5). (late March and early April, 1984).

(b) collecting printed material from the curriculum of the nursing program relating to the program philosophy, the program picture, and the intended outcomes (overall objectives). An article form the RNABC News, Jan/Feb. 1984, was used in the category of important issues/problems affecting the program.

3. Collating the above information into a package of

reading materials for the eight faculty who had volunteered to apply the procedure in developing a simulated evaluation plan for their program.

4. Meeting with these volunteers for a short orientation session. The reading materials were distributed and the researcher did a brief overview of the procedure and the nature of their subsequent involvement in the study (April 16, 1984).

5. The first meeting of the faculty volunteers (the Steering Committee) was held May 4, 1984. The researcher assisted the group in applying the first three steps of the procedure. The informational base which was used to develop this component of the simulated evaluation plan was the package of reading materials which had been prepared by the researcher about their program.

6. Distributing and collecting Part I of the Importance and Feasibility questionnaire which was completed by the committee members at the end of this meeting.

7. The second meeting of the Steering Committee was held ten days later. Using one evaluation question as a prototype example, the researcher assisted the members in applying the remaining three steps in the procedure.

8. Distributing and collecting Part II of the Importance and Feasibility questionnaire from the faculty who participated in the second meeting.

APPENDIX B

INITIAL DRAFT OF THE PROCEDURE

APPENDIX B

Initial Draft of the Procedure, field tested in an actual application (Jan. '83): An Application of Cronbach's Views on Developing an Evaluation Plan*

1. Using the program philosophy describing the Nature of Man, Nursing, Health, Teaching-Learning and Nursing Education, define the major variables affecting the educational experiences in our nursing program.

Omit nothing that matters in our real world.

Consider that Cronbach's model is an interaction one, involving the population (students), treatment (curriculum and teachers), and the setting.

 State the major purposes of the evaluation, for example, to improve the curriculum.

3. Determine the target audiences for the evaluation. Consider entering the thinking of the relevant political community, that is, those involved in political discussions about the program and those who shape the program as it operates.

4. Brainstorm all possible questions that could be asked about our program. Consider the need to have input from other sources, for example, students, college administration.

5. Based on all possible questions, select ones which are practical for us to ask, that is, within our available resources. Omission of questions is to be a deliberate choice.

In selecting questions, Cronbach suggests the following

criteria be used:

* dispelling questions of program critics

* anticipated expectations of the program

* values reflected in the program philosophy

* our greatest needs for information (uncertainty re results)

* questioning stated program goals

* areas with the greatest degree of leverage on policy choices and operating decisions (political leverage)

* questions likely to be asked about the program in the future

6. Cronbach suggests that it is helpful to break the evaluation study into comparatively small studies with varying starting dates and durations, and with different central questions: that is,

CENTRAL QUESTION

Cronbach's INTERACTION model: ALL 4 elements present for EACH question (UTOS).

* L. Cronbach. <u>Designing Evaluations of Educational and Social</u> <u>Programs</u>. San Francisco: Jossey-Bass, 1982.

APPENDIX C

EXAMPLE OF A PROGRAM PICTURE

APPENDIX C



APPENDIX D

A METHODOLOGICAL APPROACH TO PLANNING AN EVALUATION QUESTION

APPENDIX D

A METHODOLOGICAL APPROACH TO PLANNING AN EVALUATION QUESTION

<u>OBJECTIVE</u>: A logical and believable approach to evaluating a given aspect of a program - blocking off a domain of investigation.

1. STATEMENT OF THE EVALUATION QUESTION WHICH ADDRESSES THE FORMATIVE ASPECTS OF EVALUATION, that is, what factors facilitate and/or block..."

(i) Helps the evaluation study consider not only outcome behaviors, but also factors/charateristics/processes within the program which may be strongly associated with certain outcome behaviors.

(ii) Most useful in terms of curriculum planning and revising, most facilitating of decision making (selecting among various courses of action).

e.g., "What factors facilitate and/or impede the students' learning of psychomotor skills?"

2. INFORMATION NEEDED TO ANSWER THE STATED QUESTION.

(1) Factors to be included are those which provide for a basic and up-to-date description of the aspect of the program under study.

(ii) Outlines certain issues within the program thought or known to be associated with the aspect under study.

(iii) Consider the input of those most knowledgeable in the selected area.

e.g., * Describing the current situation for learning of skills (scheduled time for demonstration and practising skills in lab, student/teacher ratio, methods used to teach skills in lab, time apent in mastery demos etc.).

* assessment of skill performance in the clinical area by students (self-evaluation) and by teachers.

* nature and number of clinical learning experiences to practise skills.

* students' opinions of faciliating and blocking factors.

* teachers' opinions on faciliating and blocking factors,

3. INFORMATION NOT ALREADY MENTIONED THAT WOULD FACILITATE DECISION MAKING.

e.g., If the decision was " Do we need to change the method used to teach psychomotor skills in our program?", some other info might be-

* cost-effectiveness of implementing current method vs other methods.

4. INFORMATION NOT ALREADY MENTIONED THAT WOULD INCREASE THE CREDIBILTY OF THE STUDY WITH THE DECISION MAKERS (readers of the report).

e.g., If the decision makers designated are the nursing faculty and the Director of the Nursing Programs, other info might be-

* study included faculty input in the data collection.

* evaluation data included the amount of the students' own preparation for skill performance.

* significant numbers of students were sampled.

5. Statement of the CRITERIA (indicators) FOR CHANGE.

"For an evaluation to be meaningful... the study must go beyond simply describing what is to making judgments of worth" (Worthen and Sanders, 1973. p. 38).

(i) What information collected by the study would indicate the need for change?

(ii) Consider input by the decision makers.

(iii) Hagen (1979) suggests considering the characteristics of the students in the program, the complexity of performance embedded in the activity, and the amount of instructional time devoted to achieving competence when deciding on criteria for use in program evaluation. She also recommends that consensus be reached by the group using these criteria.

e.g., * 30% or more of the graduates have difficulty with skill performance as indicated by the Dyer tool in the 6 month followup of graduate performance.

* 30% or more of the teachers in Phase I indicate students have difficulty performing skills in the clinical area.

* 30% or more of the practicum students have difficulty with skill performance.

6. UNIT OF STUDY (target data sources).

(i) Criteria (indicators) for change help direct selection of data sources.

(ii) Consider availability of participants and data (Standards, 1981, p. 52).

(iii) Determine sample size - random selection or whole population. If statistical applications made to data, a minimum number of 30 is advisable (Bailey, 1978, p. 84).

e.g., * Which group of students (semester I, semester IV, practicum, graduates) and in what years of the program (is this a longtitudinal study).

* ?Faculty and hospital staff included - which faculty?

7. SETTING in which Data Collection takes place.

(i) Determine the settings in which data will be collected.

e.g., * nursing lab.

• clinical learning experiences for students currently in the program.

* clinical areas where the graduates work.

(ii) Describe to the extent feasible, whatever information in the setting is expected to help in interpreting the results influence of the immediate situation on the data collected (Cronbach, 1982, p. 82).

e.g., * nature and availabilty of lab equipment if nursing lab is studied.

* nature of health problems (acute M/S, or ECU), size of ward and hospital, amount of staff involvement in teaching, if clinical learning experiences are studied.

8. TREATMENT - Defining the process/thing under study.

(i) Consider the cognitive, affective, and psychomotor aspects of learning, if appropriate, in the definition.

e.g., * What constitutes "performance of a skill" (critical elements, time element, knowledge of the principles underlying the skill).

* specified skills (aseptic techniques - dressings, catherization, administering medications, monitoring intervenous therapy) or all skills generally.

* actual performance of skills by students in the clinical area (currently in the program or graduates).

* first, second, third performance of a given skill by a student or the mastery demonstration.

 * attitude (opinion) of atudenta toward teaching methoda and learning activities which facilitate and/or block learning of skills.

9. OPERATIONS - Selection of Observation and/or Measurement techniques, tools and prodedures.

(i) VALIDITY - instrument measures what you intend it to measure.

RELIABILITY - instrument will yield similar results with

similar participants over time.

(ii) Ensure methods selected will yield data that will most facilitate decision making within the program.

(iii) Consider the resources within the department to implement methods (people power, clerical assistance, money, time).

(iv) Consider use of any existing methods and/or evaluation data.

e.g., * Could items on computer-marked nursing theory exams that test knowledge of skills be coded to enable retrieval for analysis?

• Use of items on the Dyer tool which relate to skill performance of graduates.

(v) Plan to use computer-scanning cards for collecting data, facilitates management of data. Incorporate into design of tool.

(vi) Plan to minimize disruption of the natural processes of the program (Eisner, 1979).

(vii) Consider, if possible, a multimethod approach to collecting data e.g., interviews and paper and pencil tests, qualitative and quantitative methods (Cronbach, 1982; Eisner, 1979; Scriven, 1967; Tyler, 1949).

(viii) Consider your options - review the given summary of various data collection methods available, and the pros and cons of various methods (Metfessel and Michael, cited in Worthen and Sanders, 1973, p. 274-279; p. 286-287).

10. Establish a TIMELINE FOR THE STUDY and DESIGNATE A PERSON to be Responsible.

(i) Consider both departmental and insitutional planning needs:

When will the information be most valuable to the program? When will the instrument(s) be ready? When will the data be collected? When will the report be written? APPENDIX E

PROPOSAL TO THE COLLEGE

Appendix E

Proposal to the College to Implement the Research

A)Purpose of the Research

The main purpose of this research is to field test, with nursing faculty, a systematic procedure for developing a plan for an internal evaluation of a college-based diploma nursing program. The research question being asked is, "Would a procedural guide to planning educational evaluation be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program?"

B)Participation of the Nursing Department

This proposal would involve the following participation from the nursing department.

1. Permission from the Director of the Nursing Programs, and others if appropriate, for the researcher to aurvey randomly selected samples of faculty, students, and head nurses in clinical agencies in March 1984. Open-ended questionnaires would be used. Data would be collected and summarized by the researcher for the exclusive use of the nursing department at the college. The data would be used as a basis for planning an evaluation of the program. See attached for the proposed questionnaires.

2. Participation of the Program Evaluation Committee (either existing or newly formed) and the Director of the Nursing Programs in two half day meetings in late March or early April 1984, to apply the proposed procedure in developing an evaluation plan for their diploma nursing program. Reading materials would be circulated to the committee one to two weeks prior to the first meeting. This committee would also be asked to complete a questionnaire evaluating the perceived importance and feasibility of the procedure. The agendas for these two proposed meetings and questionnaire are outlined later in the report.

The literature on program evaluation suggests that a committee such as this, have representation from all groups who have a vested interest in the program. This would give the broadest perspective in planning the evaluation and help in neutralizing any biases. For example, the membership could include student and administrative representation, faculty representatives from different nursing specialty areas (Med/Surg, Obs, Peds) and from different years or semesters in the program, representatives from the Advisory Committee, or clinical agencies. An ideal number would be eight members.

(C)Perceived Benefits to the Department

Having done a recent review of the literature on program evaluation, the researcher can share with the nursing faculty the latest thinking on this topic. As a result of the time spent in applying the proposed procedure, the nursing department will have an opportunity to focus their thinking on ways to systematically plan a valid and useful evaluation of their nursing program. They will also have developed a plan for their program. The faculty will have for their use, data about their program which was collected and summarized by the researcher.

(D)Overview of the Proposed Procedure

The procedure is comprised of 5 distinct stages or different sequential activities (see attached diagram).

Stage I: Collecting specified categories of information about the program.

Stage II. Deciding on the most important decisions to be made about the program and who the main decision makers would be.

Stage III, Determining the purpose(s) of the evaluation

Stage IV. Selecting and rank ordering evaluation questions about the program.

Stage V. Specifying each evaluation question.

Stage VI. Determining a methodological approach to each question.

Information will also be provided on how to write an evaluation report.

AGENDA OF THE FIRST MEETING OF THE STEERING COMMITTEE

1. Overview of the procedure

2. Using stated program philosophy, elicit main concepts valued in the program. Consider interrelationships among concepts. (Review program picture done in Jan.83).

3. Brainstorm most important decisions to be made about the program.

4. Select and rank order these decisions using a given decision-rating scale.

5. Determine the main purposes of the program evaluation.

6. Complete an evaluation of the above process.

AGENDA OF THE SECOND MEETING OF THE STEERING COMMITTEE

1. Write one evaluation question based on the rank ordered list of program decisions and the purpose of the evaluation.

2. Specify the evaluation question.

3. Plan a methodological approach to the question.

4. Discuss the writing of an evaluation report.

5. Complete an evaluation of the above process.

APPENDIX F

QUALITATIVE DATA QUESTIONNAIRES

STUDENT, FACULTY, HEAD NURSE

PROGRAM EVALUATION

SURVEY OF

STUDENT OPINION

Program evaluation in nursing education is just as important as it is in nursing practice. Students can provide very valuable information to faculty who are deciding on how to best plan an evaluation of their program. Although your participation in this survey is voluntary, your ideas are very important! The information collected by this questionnaire is for the exclusive use of the nursing faculty at the College. This questionnaire is part of an approach to Program Evaluation in Nursing Education being tested by one of the nursing faculty for a Masters Thesis in Education at Simon Fraser University.

Your name was randomly selected from the student lists and will NEVER appear in the data. Please be as detailed as you can when answering. Your honesty will be appreciated.

Thank you for participating!

INDICATE ONE OF THE FOLLOWING :

I am afirst year student ____. second year ongoing student____. second year LPN access student____. second year RPN access student____.

(A). I feel that the 3 things which MOST facilitate my learning in this College Nursing Program are:

1.

2.

з.

(B). As a student in this program, I feel the 5 MOST important ISSUES/PROBLEMS to consider when planning an evaluation of this College Nursing program are:

1.

2.

4.

5.

(C). Every nursing program has effects on students that were NOT intentionally planned for by the faculty and the curriculum. These effects may be positive or negative.

INSTRUCTIONS

1. The following pages will ask you to state what effects this College Nursing Program has had on you that you think were NOT intentionally planned for by the faculty and the curriculum.

2. Consider BOTH positive and negative effects.

3. Comment only in areas you feel are important to you. Use the back of this form if necessary.

4. If you did not take one of the courses mentioned in the following questions, indicate this by checking the DID NOT TAKE response.

UNINTENTIONAL OUTCOMES:

(C). NON-NURSING COURSES	DID NOT TAKE
Effects on me:	No comment
	•
(D). COMMUNICATIONS COURSE(S)	DID NOT TAKE
(or PROFESSIONAL INTERACTIONS)	No comment
Effects on me:	

- (E) BIOLOGY COURSE Effects on me:
- (F). NURSING THEORY COURSES Effects on me:

i (

- (G). PHARMACOLOGY COURSES Effects on me:
- (H). NURSING LAB EXPERIENCES

Effects on me:

(I) CLINICAL EXPERIENCES

Effects on me:

(J)> RELATIONSHIPS WITH INSTRUCTORS

Effects on me:

DID NOT TAKE__ No comment__

No comment__

DID NOT TAKE

No comment___

No comment__

No comment___

No comment_

(K)> RELATIONSHIPS WITH OTHER STUDENTS

No comment__

Effects on me:

(L) EVALUATION METHODS

No comment____

(EG. EXAMS, CLINICAL BOOKS, HEALTH CARE PLANS)

Effects on me:

(M). OTHER UNINTENTIONAL EFFECTS I FEEL ARE IMPORTANT TO

MENTION:

PROGRAM EVALUATION SURVEY OF

FACULTY OPINION

Program evaluation in nursing education is just as important as it is in nursing practice. Faculty, as insiders, can provide very valuable information for use in deciding on how to best plan an evaluation of their program. Although your participation in this survey is voluntary, your ideas are very important! This questionnaire is part of an approach to Program Evaluation in Nursing Education being field tested by one of the nursing faculty for a Masters Thesis in Education at Simon Fraser University. Your cooperation would be greatly appreciated! The information collected is for the exclusive use of the nursing department at the College.

Your name will NEVER appear in the data. Please be as detailed as possible when answering. Your honesty will be appreciated.

Thank you for participating!

Answer ONE response for EACH of the following:

I am now teaching : in the first year ____. in the second year ____. non-teaching ____.

I usually teach : in the first year ____.

in the second year ____.

about equally in the first and second year ____.

I usually teach : clinical nursing courses ____.

classroom nursing courses ____.

I am now working : fulltime ____.

part time ____.

I have the following amount of experience with this College Nursing Program: _____ (months or years).

(A)I feel that the 5 most important ISSUES/PROBLEMS to consider when evaluating our nursing program are:

1.

2.

з.

4.

5.

(B)I feel the 3 most frequent statements made by CRITICS of this College Nursing Program are:

1.

2.

з.
(C) Every nursing program has outcomes which were NOT intentionally planned for by the faculty and the curriculum. These effects may be positive and negative.

State what effects you feel this College Nursing Program has had which were NOT intentionally planned for by the faculty and the curriculum. Consider both positive and negative effects.

1.

2.

з.

PROGRAM EVALUATION

OPINION SURVEY OF HEAD NURSES IN CLINICAL AGENCIES

Program evaluation in nursing education is just as important as it is in nursing practice. The head nurses directly involved with the clinical learning experiences of nursing students can provide very valuable information to faculty who are deciding on how to best plan an evaluation of their program. Although your participation in this survey is voluntary, your ideas are very important! This questionnaire is part of an approach to Program Evaluation in Nursing Education being tested by one of the nursing faculty at the College for a Masters thesis in Education at Simon Fraser University. The information collected is for the exclusive use of the nursing department at the College.

Your name and the name of the agency will NEVER appear in the data.

Please be as detailed as you can when answering. Your honesty will be appreciated! Thank you for participating.

PLEASE ANSWER ONE RESPONSE FOR EACH OF THE FOLLOWING;

1. At the present time on my unit, I have:

first year students ____.

second year students ____.

2. I usually have: first year students ____.

second year students ____.

both first and second year ____.

not applicable (my first experience) ____.

3. I have had the following experience with this College's Nursing Students (experience = one or two groups of students per week completing a clinical rotation on my unit) :

my first experience ____.

2 - 4 previous experiences ____.

more than 4 previous experiences ____.

to consider when evaluating this College Nursing Program

are:

1.

2.

з.

4.

5.

(B) I feel the 3 most frequent statements made by CRITICS of this College Nursing Program are:

1.

2,

з.

(C) Every nursing program has outcomes that were NOT intentionally planned for by the faculty and the curriculum. These effects may be positive or negative.

State what effects you feel this College Nursing Program has had which were NOT intentionally planned for by the faculty and the curriculum. Consider both the positive and the negative effects.

1.

2.

з.

APPENDIX G

EXAMPLES OF QUALITATIVE DATA ABOUT A NURSING PROGRAM COLLECTED BY THE RESEARCHER IN THE SECOND FIELD TESTING OF THE PROCEDURE



APPENDIX G

EXAMPLES OF QUALITATIVE DATA ABOUT A NURSING PROGRAM

ISSUES/PROBLEMS REPORTED BY FACULTY

All 27 faculty teaching in the apring semeater, 1984, were included in the sample. Of these, 15 completed the questionnaire (response rate 56%). Five reported usually teaching in the first year, and 10 in the second year.

In the summary, the faculty responses are organized into NINE main categories. Detailed comments made by the faculty are listed under each category. The number following each comment indicates the number of times that response was made in answer to the question. The number following the category heading is the total number of responses which were made related to that topic area.

1. Performance of Graduates: 12

* functioning of graduates in work settings (use of nursing process, knowledge, communication skills, professional behavior)-8

* success of graduates on R.N. exams -1

* ability of students (graduates) to recognize own strengths and
weaknesses -1

 * ability to interact professionally with others (communication skills, legal issues, policies) -2

2. Clinical Learning Experiences: 13

* clinical settings appropriate in meeting the needs of the students (help prepare for graduate responsibility) -4

* student/teacher ratio, cooperation of agencies, evaluation tool (format and time it takes), student progress-2

* appropriateness of ECU vs Med/Surg for first rotation -1

* amount of clinical time (related to # of skills, amount of theory taught)-2

* students' abilty to apply theory in clinical -1

students' ability to give safe and thorough basic care -2

* students' ability to set priorities and organize care for 4-5 patients -1

3. Content: 14

* depth, amount, level of mastery, relevance to students,up-to-date (relevance to prevalent health problems),application of model-4 * ability of students to use the nursing process -4 (should there be a stronger emphasis on assessment rather than stating problems and goals in first year - 1 response)

* sequencing of theory courses (first year) i.e., pharmacology and biology -1

* biology- more direct application to human Anatomy and Physiology rather than a general course - 1

* students' difficulty with math -I.V. and medication dosage calculation- 1

* students' communication skills -1

* effects of a college system on a program course -1

APPENDIX H

READING MATERIALS

FOR THE

STEERING COMMITTEE

NOTE:

The appendix includes only the introductory portion of the fiftytwo page report provided to the Steering Committee. The table of contents which is provided lists the major sections of the entire report. A sample of the qualitatative data resulting from the surveys is given in Appendix G.

APPENDIX H

Reading Materials for the Steering Committee TABLE OF CONTENTS

1. Introduction
2. Overview of the Procedure4
3. Preparation for the First Meeting
4. Preparation for the Second Meeting
5. Program Philosophy7
6. Program Picture
7. Intended Outcomes: Overall Objectives of the Old Curriculum
8. Intended Outcomes: Overall Objectives of the New Curriculum
9. Intended Outcomes: Survey Results, factors which facilitate atudent learning
10.Issues/Problems: Survey Results First Year Students
11.Issues/Problems: RNABC Position Paper on Entry to Practice
12.Unintentional Outcomes: Survey Results First Year Students
13.Critics Views: Survey Results Faculty
Head Nurses

INTRODUCTION

The procedure proposed in this thesis presents one way nursing faculty could approach the task of planning an internal evaluation of their program. Your involvement in two one-half day meetings, as a member of a Program Evaluation Steering Committee, will be to review specified information about your College Nursing Program and subsequently apply the proposed procedure to develop an evaluation plan. The research question to be answered by this activity is, "Would a procedural guide to planning educational evaluation be viewed by nursing faculty as a feasible and important approach to the planning of an internal evaluation of their program. You will be asked to complete a questionnaire at the end of each of the meetings. These questionnaires will ask for your opinions regarding the feasibility and importance of the proposed procedure in assisting you to develop the evaluation plan. Your name and the name of the college will NEVER appear in the data.

The proposed procedure is adapted primarily from the ideas of L. Cronbach, "Designing Evaluations of Educational and Social Programs," San Francisco: Jossey-Bass, 1982. I introduced his approach to evaluating programs to the Program Evaluation and Research Committee in January, 1983. Some of you may recognize aspects of the procedure from those discussions. I understand that this approach has continued to be used by the committee. Modifications have been made in this thesis in the sequencing and focus of the different steps in the procedure.

OVERVIEW OF THE PROCEDURE

Figure 1 depicts an outline of the proposed procedure for developing an internal evaluation plan of a nursing program. The procedure involves six different sequential planning activities.

The first step in the procedure, that of collecting specified data about the program, has already been completed. That material is included in this packet for your review. The data and materials collected relate specifically to the five categories of information about the program designated in the This forms the informational base from which the procedure. most important decisions to be made about the program are drawn. The decisions makers are also designated. Step three in the procedure involves outlining the purposes of the evaluation. These first three steps in the procedure will be covered in the first meeting of the committee.

Step four involves the selection and rank ordering of the evaluation questions, the organizing framework for the plan. The fifth step is to specify the information needed to answer given evaluation question. The planning at this point includes both the information that will most facilitate decision making within the department and the information that will be most credible to the readers of the report. Specifying the evaluation question also involves stating the criteria that will be used as a basis for change. Step five in the procedure is intended to assist the planners in selecting the most appropriate methodological approach to collecting data related to an

evaluation question. Steps four through six in the procedure will be applied in the second meeting of the committee.

Preparation for the First Meeting

The purpose of the first meeting of the committee will be to apply the first three steps of the procdure. In preparation for the meeting, please review the material in this packet. This material relates specifically to the five categories of information about the program designated in the procedure and forms the informational base from which the most important decisions to be made about the program will be drawn. As you review the data, please consider what decisions you feel should be made about the program. These ideas will be discussed and compiled at the meeting. A decision-rating scale will be provided to assist the group in selecting and rank ordering decisions.

The material in this packet includes:

(i) the philosophical statements of the nursing program,
developed by the nursing faculty for the new curriculum.
(Consider if these statements are suitable for use as the philosophical basis of the evaluation plan.)

(ii) a "picture" of the College Nursing Program, done by the Program Evaluation and Research Committee of the Nursing Department in January 1983. (This "picture" was done by the group based on the ideas expressed in the program philosophy. Consider if you feel it is an accurate representation of the program.)

(iii) the intended outcomes of the program as outlined in

three data sources: the overall objectives of the new curriculum (relevant to the first year), the overall objectives of the old curriculum (relevant to the second year), and the survey results of student questionnaires asking for factors which facilitated their learning in the program.

(iv) current issues/problems affecting the program, as indicated in a survey of students, faculty, and head nurses. The RNABC position paper on entry to practice is also included in this category.

(v) unintentional outcomes of the program as indicated in a aurvey of students, faculty, and head nurses.

(vi) views of program critics as indicated in a survey of faculty and head nurse.

The Second Meeting of the Committee

There will be no further reading required in preparation for the aecond meeting. Based on the results of the work done in the first meeting, one evaluation question will be devised by the group and used as a prototype example in applying the last three steps in the procedure (see figure 1). This will include specifying the evaluation question and planning the methodological approach to the implementation of the study. The committee members will also receive a summary, prepared by the researcher from the literature, about writing an evaluation report.

APPENDIX I

IMPORTANCE AND FEASIBILTY QUESTIONNAIRE PART I

NOTE:

In order to conserve space in the presentation of this thesis, the format of the questionnaire has been condensed. The scales illustrated on the first page of the questionnaire were given for each question in the actual field testing. In this appendix, the questions are listed for review. Chapter five of the thesis also illustrates the construction of the questionnaire.

APPENDIX I

PART I

EVALUATION OF THE PROPOSED PROCEDURE

ΒY

MEMBERSHIP OF THE PROGRAM EVALUATION STEERING COMMITTEE

1. The first part of this questionnaire asks you to describe your educational background and experience in nursing and in program evaluation. This data will be used in the thesis to describe the background 'experiences of the members of the Steering Committee. Your name and the name of the college will NEVER appear in the data.

2. Please indicate your AGREEMENT or DISAGREEMENT with the feasibility and importance of each of the steps used in applying this procedure to developing an evaluation plan for your nursing program.

FEASIBILITY is defined as capable of being put into effect, workable, suitable for use.

IMPORTANCE is defined as critical, valued, essential.

3. Please add detailed comments to support your views.

4. The views expressed in this questionnaire will be used to revise the procedure into a form most appropriate for use by faculty in the planning of an internal evaluation of a diploma nursing program.

PROFILE OF THE COMMITTEE MEMBERS

f

FACTOR	YOUR EXPERIENCE
CLINICAL SPECIALTY (clinical area + usual phase you teach in the program	
YEARS EXPERIENCE IN NURSING EDUCATION	
EDUCATIONAL BACKGROUND (degrees and/or certificates attained)	S.
COURSES COMPLETED IN RESEARCH DESIGN OR STATISTICS	
NATURE OF EXPERIENCE IN PROGRAM EVALUATION (e.g., questionnaire construction, collecting survey data)	
ן י י	

CIRCLE ONLY ONE RESPONSE

(A) SURVEYING OPINIONS:

Regarding program evaluation planning:

1. Using open-ended questionnaires to survey opinions of the FOUR categories of nursing students in our program was:

	STRONGLY			S	TRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT	1	2		4	5

COMMENTS:

	STRONGLY			S	TRONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE.	1			4	5

COMMENTS:

2. Using an open-ended questionnaire to survey faculty opinions was:

3. Using an open-ended questionnaire to survey opinions of head nurses in clinical agencies was :

(B) USE OF PROGRAM PHILOSOPHY

Regarding program evaluation planning:

4. Use of the stated program phiosophy as the philosophical basis of the plan was:

5. Using the stated program philosophy to elicit the main concepts and their interrelationships (draw the program picture) was:

(C)DATA SOURCES

Regarding program evaluation planning:

6. Using the PROGRAM PICTURE to assist in eliciting decisions to be made about the program was:

7. Using the summary of important issues or problems form the surveys to elicit decisions to be made about the program was:

8. Using the summary of issues presented in the RNABC position paper to assist in eliciting decisions was:

9. Using the program objectives (intended outcomes) to assist in eliciting decisions was:

10. Using the summary of perceived views of program critics to assist in eliciting decisions was:

11. Using the summary of unintentional outcomes to assist in eliciting decisions was: 12. Using these FIVE categories of program information to assist in eliciting decisions to be made about the program was:

(D) DECISION MAKING

Regarding program evaluation planning:

13. Using the decision-rating scale to assist in the selection and rank ordering of decisions about the program was:

14. Determining who the decision makers would be for each decision was:

(E)FOCUSING PURPOSE

Regarding program evaluation planning:

15. Using the list of rank-ordered decisions to be made about the program to focus on the main purposes of the program evaluation was:

APPENDIX J

IMPORTANCE AND FEASIBILITY QUESTIONNAIRE PART II

NOTE:

In order to conserve space in the presentation of this thesis, the format of the questionnaire has been condensed. The scales illustrated on the first page of the questionnaire were given for each question in the actual field testing. In this appendix, the questions are listed for review. Chapter five of the thesis also illustrates the construction of the questionnaire.

APPENDIX J

PART II

EVALUATION OF THE PROPOSED PROCEDURE

BY THE

MEMBERSHIP OF THE PROGRAM EVALUATION STEERING COMMITTEE

1. Please indicate your AGREEMENT or DISAGREEMENT with the feasibility and importance of each of the steps used in applying this procedure to developing an evaluation plan for your nursing program.

FEASIBILITY is defined as ... capable of being put into effect, workable, suitable for use.

IMPORTANCE is defined as ... critical, valued, essential.

2. Please add detailed comments to support your views.

3. The views expressed in this questionnaire will be used to revise the procedure into a form most appropriate for use by faculty in the planning of an internal evaluation of a diploma nursing program. Your name and the name of the college will NEVER appear in the data.

CIRCLE ONLY ONE RESPONSE

(A) SPECIFYING THE EVALUATION QUESTION

Regarding program evaluation planning:

1. Stating the question in terms of facilitating and blocking factors was:

57	RONGLY			STI	RONGLY
DI	SAGREE D	ISAGREE	NEUTRAL	AGREE	AGREE
(a) IMPORTANT		2	3	4	5

COMMENTS:

	STRONGLY			51	RONGLY
	DISAGREE	DISAGREE	NEUTRAL	AGREE	AGREE
(b)FEASIBLE.				4	5

COMMENTS:

2. Outlining the nature and detail of information needed to answer the evaluation question was:

3. Specifying the criteria which would be used as a basis for change was:

(B) DESIGNING A METHODOLOGICAL APPROACH

Regarding program evaluation planning:

4. Deciding on the UNIT, TREATMENT, OPERATIONS, and SETTING (UTOS) for the evaluation question was:

5. Considering the list of authors'views on OPERATIONS (data collection methods) was:

6. Setting a timeline and determining a coordinator for an evaluation question was:

(C) USE OF CENTRAL QUESTION

Regarding program evaluation planning:

7. Using central questions as the organizing framework for the plan to evaluate a nursing program would be:

GENERAL COMMENTS ABOUT THE PROPOSED PROCEDURE:

THE REVISED DECISION-RATING SCALE

(based on feedback received in the second field testing)

APPENDIX K

A DECISION - RATING SCALE

This instrument is designed to assist a faculty group in the process of rank ordering the most important decisions to be made about a diploma nursing program. These decisions can be used as a basis for planning an internal evaluation of that program.

There are 2 steps involved in using this instrument: (i)adding specific information about your program to operationalize each criterion.

(ii) using the summary sheet to tally individual numerical scores to rank order proposed evaluation decisions.

INSTRUCTIONS

1. List all possible decisions that could be made about the program.

2. As a group, add specific information about your program relevant to each of the criterion.

3. Individually, rate each of the proposed decisions by assigning a numerical score of 1 - 5 on the summary sheet for each of the criteria.

4. Add the scores assigned to the 6 criteria to obtain a total score for each decision.

5. Tally individual ratings to indicate a group score for each decision.

6. Use the totalled group scores to rank order the proposed decisions.

CRITERIA FOR RATING EVALUATION DECISIONS

1. STATED VALUES OF THE PROGRAM

Major philosophical orientation(s) of the curriculum, for example, adaptation to current manpower needs, facilitating cognitive processes, changing the status quo.

The major concepts valued in our program are:

2. STUDENT NEEDS

Use recent qualitative data collected from students re unintended outcomes of the program and major issues/problems from their perspective.

The data indicated the major topic areas which should be addressed concerning the needs of our students are:

3. TIMELINESS OF INFORMATION TO PROGRAM IMPROVEMENT

Consider what topic areas would be most relevant to your immediate program planning needs, for example, the fit between new theory content and the clinical learning experiences available for students.

Given the present stage of development of your curriculum, the most timely issues to evaluate are:

4. <u>POLITICAL LEVERAGE</u> (Advocacy role of program evaluation)

Consider the biases/values held by external power groups (legislatures, professional groups) in the community who are able to influence the viability or ultimate character of your program. Also consider areas that influential CRITICS of your program would like to see evaluated. Qualitative data from agency staff could be used and/or the RNABC criteria for approval of programs.

An evaluation study which addressed the following issues would most likely evoke a positive community response to our program:

5. IMPACT ON POLICY CHOICES & OPERATING PRACTICES

Consider which decisions would provide the most valuable/useful information to assist in making choices among possible policy and operating alternatives, for example, admission criteria, or staffing patterns.

Regarding our present policies and operating practices, the most useful information that could be provided by an evaluation study would concern the following topics:

6. DEGREE OF INFORMATIONAL NEED

Consider which evaluation findings would most increase your present knowledge of the program processes or outcomes, for example, if you already know that most students feel positively about the method used to teach psychomotor skills, further investigation of this area would not likely yield new information.

The following topics have already been extensively evaluated in our program:

A DECISION-RATING SCALE

SUMMARY OF INDIVIDUAL RATINGS

	- <u>.</u>			. <u>.</u>						
	TOTAL	CINIDA				·				
	DEGREE OF	TIN O NEED			······································		 	 		
	IMPACT ON	OPERATING	PRACTICES				•		, , , , , , , , , , , , , , , , , , , 	•
CRITERIA	POLITICAL						20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -			
	TIMELINESS OF INFORMATION	TO PLANNING	-						·····	
	STUDENT						 	 <u>,</u>		
	STATED VALUES OF PROGRAM							 	- 01	
	DECISION									

APPENDIX K

List of References

- Alkin, M. C. (1973). Evaluation theory development. In B. R. Worthen, & J. R. Sanders (Eds.), <u>Educational evalua-</u> <u>tion: theory and practice</u> (pp. 150-155). Belmont,CA.: Wadsworth.
- Allen, M. (1977). Evaluation of educational programmes in nursing. Geneva: W.H.O. publication.
- Allen, M., & Reidy, M. (1971). Learning to nurse: The first five years of the Ryerson Nursing Program. Toronto: Registered Nurses Association of Ontario.
- American Psychological Association. (1974). <u>Publication manual</u> (2nd ed.), Washington, DC.: Author.
- Bailey, K. D. (1978). <u>Methods of social research</u>. New York: The Free Press.
- Bloom, B. (1976). <u>Human characteristics and school learning</u>. New York: <u>McGraw Hill</u>.
- Bonnet, D. G. (1981). Five phases of purposeful inquiry. In R.S. Brandt (Ed.), Applied strategies for curriculum evaluation (pp. 9-24). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Borich, G. D. (1983). Evaluation models: a question of purpose not terminology. Educational Evaluation and Policy Analysis, 5, 61-63.
- Borus, M. E., Buntz, C. G., & Tash, W. R. (1982). Evaluating the impact of health programs: a primer. Cambridge: N.I.T. Press.
- Brandt, R. S. (Ed.) (1981). <u>Applied Strategies for Curriculum</u> <u>Evaluation</u>. Alexandria, VA.: Association for Supervision and Curriculum Development.
- Bricknell, H. M. (1981). Groping for the elephant. In R. S. Brandt (Ed.), <u>Applied strategies for curriculum</u> <u>development</u> (pp. 91-103). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Buros, O. K. (1977). Fifty years of testing: some reminiscences, criticisms, and suggestions. <u>Education</u> <u>Research</u>, <u>4</u>, 9-15.
- Canadian Association of University Schools of Nursing. (1983). <u>Accreditation: criteria and process for</u> <u>baccalaureate programmes in nursing</u>.

- Capobianco, A. T. (1979). The development of a system for <u>evaluation</u>. (NLN Publication No. 23-1775). New York: National League For Nursing.
- Common, D. L. (1981). Two decades of curriculum innovation and so little change. <u>Education Canada</u>, <u>3</u>, 42-47.
- Cook T. D., & Campbell D. T. (1979). Quasiexperimentation, design and analysis issues for field settings. Chicago: Rand McNally College Publishers.
- Cronbach, L. J. (1982). Designing evaluations of educational and social programs. San Francisco: Jossey-Bass.
- Eisner, E. W. (1979). The educational imagination: on the design and evaluation of school programs. New York: MacMillan.
- Eisner, E. W. (1981). Using professional judgment. In R. S. Brandt (Ed.), <u>Applied strategies for curriculum</u> <u>evaluation</u> (pp. 41-47). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Fullen, M. (1979). Conceptualizing problems of curriculum implementation. In W. Werner, (Ed.), <u>Curriculum</u> <u>Canada</u> (pp. 40-50). Vancouver: University of British Columbia, Center for Curriculum and Instruction.
- Glasman, N. S., & Biniaminov, I. (1981). Input-output analysis of schools. <u>Review of Educational Research</u>, <u>51</u>, 509-539.
- Guidelines for the Preparation of College Strategic and Operational Plans (November, 1982). Publication of the Ministry of Education, Government of British Columbia.
- Hagen, E. (1979). The methodology of collecting, handling, and analyzing data. In <u>A judgment of merit-evaluation</u> of programs in nursing: <u>methodology</u> (pp. 55-72).(NLN Publication No. 16-1765). New York: National League for Nursing.
- Hammond, R. L. (1973). Evaluation at the local level. In B. R. Worthen & J. R. Sanders (Eds.), Educational evaluation: theory and practice (pp. 157-169). Belmont, CA.: Wadsworth.
- Henerson, M., Morris, L. L., & Taylor Fitz-Gibbon, C. (1978). <u>How to measure attitudes</u>. Beverly Hills: Sage Publications.
- House, E. R. (1978). Assumptions underlying evaluation models. Educational Researcher, 2 (3), 4-12.

- Joint Committee on Standards for Educational Evaluation. (1981). <u>Standards for evaluation of educational</u> <u>programs, projects, and materials</u>. New York: McGraw Hill.
- Klausmeier, H. J. (1982). A research strategy for educational improvement. Educational Researcher, <u>11</u> (2), 8-13.
- Krathwohl, D. R. (1973). The taxonomy of educational objectives - use of cognitive and affective domains. In B. R. Worthen & J. R. Sanders (Eds.), <u>Educational</u> <u>evaluation: theory and practice</u> (pp.246-268). Belmont CA.: Wadsworth.
- Krueger, J. C. (1980). Establishing priorities for evaluation and evaluation research: a nursing perspective. <u>Nursing Research</u>, 29 (2), .
- Lewy, A. (1981). Timeliness and efficiency in serial evaluation activities. <u>Educational Evaluation and Policy</u> <u>Analysis, 3</u> (3), 55-65.
- Love, A. J. (Ed.). (1983). Developing effective internal evaluation. <u>New Directions for Program Evaluation</u>, <u>20</u> (4).
- Lynch, E. A. (1978). Evaluation, principles and processes. (NLN Publication No. 23-1721). New York: National League for Nursing.
- Madeus, G., & Haney, W. (1978). Making sense of the competency-testing movement. Cembridge Mass: The Huron Institute.
- Madey, D. (1982). Some benefits of integrating qualitative and quantitative methods in program evaluation, with illustrations. <u>Educational Evaluation and Policy</u> <u>Analysis</u>, <u>4</u> (2), 223-236.
- Marriner, A., Langford, T., & Goodwin, L. (1980). Curriculum evaluation: wordfact, ritual, or reality. <u>Nursing</u> <u>Outlook</u>, <u>28</u> (4), 228-232.
- Martin, J. (1977). The development and use of classroom observation instruments. <u>Canadian Journal of Education</u>, <u>2</u> (3), 43-53.
- McLaughlin, M. B., & Berman, P. (1975). <u>Critical processes in</u> <u>implementation</u>. Paper presented at IMTEC Training Course, West Germany.

- McLaughlin, M. B., & Marsh, D. D. (1978). Staff development and school change. <u>Teachers College Record</u>, <u>80</u> (1), 69-94.
- Metfessel, N. S., & Michael, W. B. (1973). A paradigm involving multiple criterion measures for the evaluation of the effectiveness of school programs. In B. R. Worthen, & J. R. Sanders (Eds.), <u>Educational evaluation: theory and practice</u> (pp. 269-288). Belmont, <u>CA.:</u> Wadsworth.
- Mitchell, R. (1979, January). Testing the teachers: the Dallas experiment. Atlantic Magazine.
- Norris, L. L., & Taylor Fitz-Gibbon, C. (1978). <u>The</u> <u>evaluator's handbook</u>. Beverly Hills: Sage.
- National League for Nursing. (1979). <u>A judgment of</u> <u>merit - evaluation of programs in nursing: applications.</u> (NLN Publication No. 16-1773). New York: National League for Nursing.
- National League for Nursing. (1979). The Reliability of <u>Achievement Tests</u>. 4 (1).
- Papagiannis, G., Klees, S. J., & Bickel, R. (1982). Toward a political economy of educational innovation. <u>Review</u> of Educational Research, <u>52</u> (2), 245-290.
- Page, E. B., & Stake, R. E. (1979). Should evaluation be more objective or more subjective. <u>Educational Evaluation</u> <u>and Policy Analysis</u>, 1 (1), 45-47.
- Phi Delta Kappa (PDK) Commission on Evaluation, 1971. Cited in B. R. Worthen & J. R. Sanders (Eds.).(1973). Educational Evaluation: theory and practice (p.8). Belmont CA.: Wadsworth.
- Popham, W. J. (1975). <u>Educational Evaluation</u>. Englewood Cliffs, NJ.: Prentice-Hall.
- Popham, W. J. (1981). The evaluator's curse. In R. S. Brandt (Ed.), <u>Applied strategies for curriculum</u> <u>evaluation</u> (pp. 1-8). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Registered Nurses Association of British Columbia. (1977, June). <u>Criteria policies and procedures for approval</u> of programs preparatory to nurse registration. Vancouver: Author.
- Registered Nurses Association of British Columbia. (1984). RNABC adopts a position on entry to practice. <u>RNABC</u> <u>News</u>, <u>16</u> (1), 16-17.

- Rossi, P. H., & Freeman, H. E. (1982). Evaluation, a systematic approach (2nd ed.). Beverly Hills: Sage.
- Saracho, O. (1982). New dimensions in evaluating the worth of a program. <u>Education</u>, <u>103</u>, (1), 74-78.
- Scriven, M. (1973). The methodology of evaluation. In B. R. Worthen, & J. R. Sanders (Eds.), <u>Educational</u> <u>evaluation: theory and practice</u> (pp. 60-105). Belmont CA.: Wadsworth.
- Scriven, M. (1981). The Radnor evaluation derby. In R.S. Brandt (Ed.), <u>Applied strategies for curriculum</u> <u>evaluation</u> (pp.34-40). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Shumacher, D. A. (1979). Program evaluation a systematic means of program improvement. In <u>A judgment of</u> <u>merit - evaluation of programs in nursing: methodology</u> (pp. 11-20). (NLN Publication No. 16-1765). New York: National League for Nursing.
- Sichel, J. (1982). Program evaluation guidelines: a research handbook for agency personnel. New York: Human Sciences Press.
- Stake, R. E. (1967). The countenance of educational evaluation. <u>Teachers College Record</u>, <u>68</u> (7), 523-540.
- Stake, R. E. (1976). Evaluating educational programmes, the <u>need and the response</u>. Urbana Champaign: University of Ilinois, Center for Instructional Research and Curriculum Evaluation.
- Stake, R. E., & Peasol, J. A. (1981). Evaluating reaponaively. In R. S. Brandt (Ed.), Applied strategies for curriculum evaluation (pp. 25-33). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Steed, M. (1974). An evaluation of the students and graduates of college nursing programs in the province of <u>Alberta.</u> Edmonton: Universities Coordinating Council, published by the Department of Advanced Education for the Committee on Nursing Education.
- Stufflebeam, D. L. (1968). Evaluation as enlightenment for decision-making. Columbus: Ohio State University.
- Stufflebeam, D. L. (1973). Educational evaluation and decision-making. In B. R. Worthen, & J. R. Sanders (Eds.), Educational evaluation: theory and practice (pp. 128-142). Belmont, CA.: Wadsworth.
- Stufflebeam, D. L., & Webster, W.J. (1980). An analysis of alternate approaches to evaluation. <u>Educational</u> <u>Evaluation and Policy Analysis</u>, 2 (3), 5-20.
- Sunset Clause, Section 68, Bill 52. (1981). College and Institute Act, British Columbia Legislature.
- Taylor Fitz-Gibbon, C., & Morris, L. L. (1978). How to design a program evaluation. Beverly Hills: Sage.
- Tyler, R. (1949). <u>Basic principles of curriculum and</u> <u>instruction</u>. Chicago: University of Chicago Press.
- Vaughn, J. C. (1979). The methodology of collecting, handling, and analyzing data. In <u>A judgment of</u> merit - evaluation of programs in nursing: methodology (pp. 21-25). (NLN Publication No. 16-1765). New York: National League for Nursing.
- Wasserman, S. (1979, April/May). Evaluation practices and the emperor's new clothes. <u>Childhood Education</u>. Washington DC.: Association for Childhood Education International.
- Webster, W. J. (1981). CIPP in local evaluation. In R. S. Brandt (Ed.), Applied strategies for curriculum evaluation (pp. 48-57). Alexandria, VA.: Association for Supervision and Curriculum Development.
- Weiss, C. H. (1972). Evaluation research: methods of assessing program effectiveness. Englewood Cliffs, NJ.: Prentice Hall.
- Weiss, C. H. (1975). Evaluation research in the political context. In E. L. Stuening, & M. Guttentag (Eds.), The <u>handbook of evaluation research</u> : Vol. 1 (pp. 13-26). Beverly Hills: Sage.
- Weiss, J. (1980). Assessing conventional and nonconventional outcomes. <u>E + M Newsletter</u>, (No.34), Toronto: Ontario Institute for Studies in Education, Educational Evaluation Center.
- Wilhelm, F. T. (Ed.),(1967). <u>Evaluation as feedback and</u> <u>guide: 1967 Yearbook.</u> Washington DC.: Association for Supervision and Curriculum Development.
- Worthen, B. R. (1977). Eclecticism and evaluation models: snapshots of an elephant's anatomy. Paper presented at the annual meeting of the American Educational Research Association, New York.

Worthen, B. R. (1981). Journal entries of an eclectic evaluator. In R. S. Brandt (Ed.), <u>Applied strategies for</u> <u>curriculum evaluation</u> (pp.58-90). Alexandria, VA.: Association for Supervision and Curriculum Development.

Worthen B. R., & Sanders, J. R. (Eds.)(1973). <u>Educational</u> <u>evaluation: theory and practice</u>. Belmont CA.: Wadsworth.