Program evaluation in baccalaureate schools of nursing

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Brady, Linda H.

PROGRAM EVALUATION IN BACCALAUREATE SCHOOLS OF NURSING

Iowa State University

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Program evaluation in baccalaureate schools of nursing

by

Linda H. Brady

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
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For the Graduate College

Iowa State University
Ames, Iowa
1986
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GENERAL INTRODUCTION

Background

Providers of most educational programs now recognize that programs must be evaluated to determine effectiveness. Although educational program evaluation, in general, did not come into prominence until the Elementary and Secondary Education Act of 1965 required it as one condition for the initiation and funding of new educational programs (Anderson, Ball, Murphy & Associates, 1975), the nursing community has acknowledged this process as necessary and beneficial since the first curriculum study for schools of nursing in 1917 (Donahue, 1985).

Evaluation and accountability have since become two of the most commonly used words in the literature of higher education today, and nursing education programs within those institutions are no exception. State legislatures and institutional governing bodies are demanding evidence of cost effectiveness, while students, accrediting bodies, employers, professional communities and health care consumers are demanding new alternatives and greater participation in what previously has been considered matters of professional prerogatives (Friesner, 1978; Stone, 1978).
Need for the Study

The federal legislation of 1965 stimulated both educators and evaluators to propose different models of program evaluation. Models, in general, are noted for providing direction and supplying an approach to a process (Reynolds, 1977). These suggested models, sometimes referred to as theories, analytical plans, or frameworks, can assist the evaluator in structuring his or her thoughts and, therefore, his or her approach to the domain of program evaluation as well as to an approach for a specific evaluation.

Ediger, Snyder and Corcoran (1983) point out that evaluators or educators with less expertise or time oftentimes utilize a program evaluation model that is already proposed in the literature, whereas those individuals with more expertise may elect to develop a model, modify an existing model or combine features from several models. Popham (1975) encourages evaluators to adopt an eclectic approach in the pursuit of effective and efficient program evaluation.

In contrast to a model, an evaluation design is the plan for collecting the information indicated by the chosen model. A workable program evaluation design, based upon an appropriate model, may indicate the broad areas of the
program to be evaluated, the person or group responsible for this component of the evaluation, the evaluation tool or source to be utilized, the documentation source for the necessary information, and the deadline date for that component of the evaluation. The particular model used, as well as the demands of the various audiences for the evaluation, may understandably alter the specific areas identified within the individual plan (Wakim, 1983).

Nurse educators in accredited programs are familiar with the process of developing and implementing a plan for systematic program evaluation: such a plan is mandated by their accrediting association and must be in evidence when the visiting team arrives for the on site visit. Evidence must also be present to demonstrate the plan has been implemented as well as the manner in which the results of the ongoing evaluation are used for program improvement.

Although many suggestions have been given as to an appropriate model for program evaluation in nursing education (Ediger et al., 1983; Hauf, 1981; LaBelle & Egan, 1975; Stone, 1978; Wakim, 1983), there is no evidence of a descriptive study as to the state of the art of program evaluation in nursing education. The need for accountability and evaluation is recognized; the value of models of program evaluation is addressed; the use of a program evaluation model to provide the direction necessary
for the plan of program evaluation is neither universally documented nor universally recognized throughout nursing education. In addition, although it is evident that attainment and maintenance of accreditation status is a goal of the great majority of schools of nursing, the relationship between the accreditation process and the process of program evaluation in these schools is difficult to ascertain.

The frightening aspect of both the demands for and the responses to greater accountability through increased evaluation of our nursing educational programs is the unorganized manner in which nurse educators have gathered data without conceptualizing the process of evaluation or the implications of accountability at the institutional, departmental, or individual instructor level, much less the implications of systematically gathering data to evaluate total program effectiveness (Stone, 1978).

Purpose of the Study

The present study was designed for several purposes: to describe prevailing practice in program evaluation by baccalaureate schools of nursing throughout the country; to present a model of program evaluation for nursing education that incorporates the essence of the emphasis from the
specialized accrediting body for nursing as well as recommendations from current literature pertinent to program evaluation; and to describe an application of the proposed model into an actual evaluation plan for a baccalaureate program in nursing.

Explanation of Dissertation Format

A general review of the literature will precede the main sections of this dissertation. The literature review will address literature pertinent to program evaluation in general, program evaluation within schools of nursing, the accreditation model of program evaluation, and the recognized specialized accreditation agency for nursing.

Three articles will be presented so as to be suitable for publication in a professional journal in nursing, Nursing and Health Care, published by the National League for Nursing (NLN). The NLN is the recognized specialized accreditation agency for nursing. The candidate will be the primary author of each article.

The first article will describe prevailing practices of program evaluation in baccalaureate schools of nursing throughout the country. The second article will present a model of program evaluation for nursing education that incorporates the essence of the emphasis from the specialized accrediting body for nursing as well as
recommendations from current literature pertinent to program evaluation. The third article will describe an application of the proposed model into an actual evaluation plan for a baccalaureate program in nursing located within a small liberal arts university in the midwest.

A summary and discussion of the entire dissertation will follow the articles and include suggestions for additional investigation.
GENERAL REVIEW OF THE LITERATURE

Introduction

In this chapter, literature related to the field of program evaluation in general will be reviewed as well that specific to program evaluation methods used in schools of nursing, followed by literature related to the accreditation model of program evaluation, and literature related to the specialized agency which accredits schools of nursing.

Program Evaluation

Although a specific history of program evaluation has yet to be written (Madaus, Scriven & Stufflebeam, 1983), it is generally acknowledged that program evaluation stepped into the limelight as a discipline with the passage of the Elementary and Secondary Education Act of 1965. Title I of this act required school districts receiving federal funds for the education of disadvantaged students annually evaluate the degree to which the projects funded had achieved their stated goals (Anderson et al., 1975).

Stufflebeam and Webster (1980) inform us that the discipline of educational evaluation has developed rapidly during the intervening years, influenced by the legislation in 1965, the "nationwide accountability movement that began
in the early 1970s; and, most importantly, by the mounting responsibilities and resources that society assigned to educators" (p. 5).

The products of this productivity are frequently referred to as models, which are noted for providing direction, indicating parameters, supplying a systematic approach to a process, and specifying relationships among the parts of a whole (Reynolds, 1977). Stake (1981), however, states the conceptualizations produced during this period lack the complexity and completeness found in a model, and should therefore be referred to as persuasions.

Regardless of the term used to describe these conceptualizations, evaluators and educators alike have attempted to organize them into a systematic framework, usually with the focus on the emphasis or uniqueness of each approach as seen by the individual performing the organization. Although evaluation models differ, each serves the purpose of systematically organizing data to assist the evaluator with the choices among the various alternatives available in any type of programmatic evaluation. While a model does not eliminate all the problems and frustrations of evaluation, it does make the task more manageable (Ediger et al., 1983).
Gardner (1977) identifies five basic definitions of evaluation: evaluation as professional judgment; evaluation as measurement; evaluation as the assessment of congruence between performance and objectives; decision-oriented evaluation; and goal-free/responsive evaluation. Gardner (1977) categorizes the various approaches to program evaluation according to their congruence with one of these definitions.

Nevo (1983) prefers categorizing the methods of program evaluation according to the four functions he believes evaluation serves: formative, summative, sociopolitical and administrative.

A commonly used system of categorizing the existing conceptualizations is proposed by Worthen and Sanders (1973) in their three category system consisting of judgmental strategies, decision-management strategies and decision-objective strategies. Popham (1975) apparently altered this system slightly by proposing a four category system that consists of goal-attainment models, judgmental models focusing on intrinsic criteria, judgmental models focusing on extrinsic criteria, and decision-facilitation models. In judgment strategy models, the evaluator makes judgments on the collected data. These judgments are presented to the decision-makers. Examples of judgment strategy models, or judgmental models focusing on extrinsic
criteria, are those of Stake (1967) and Scriven (1973). The accreditation model is an example of a judgmental strategy focusing on intrinsic criteria. The emphasis of the evaluation in the decision-management models, or the decision facilitation models, is to gather data and describe the circumstances and findings to the decision-makers, thereby presenting the decision-makers with the responsibility for determining both the judgments and the decisions resulting from these judgments. The model proposed by Stufflebeam (1968) is such a model. The decision-objective models, or the goal-attainment models, are directed toward determination of the degree to which the stated program objectives have been achieved. The models suggested by Tyler (1949) and Metfessel and Michael (1967) are examples of the goal attainment model.

Litwack, Linc and Bower (1985) inform us that, in order to be effective, the particular model chosen for program evaluation should have the following features:

1. Clarification of objectives of the evaluation.
2. Definition of the role of the evaluator and relationship to administration.
3. Statement of assumptions underlying the evaluation.
4. Clarification and acknowledgement of decisions
resulting from evaluation.

5. Development of a design for conducting the evaluation.

6. Application of judgment as to the merit or worth of the evaluation.

7. Identification of the feedback mechanism (p. 38).

Program Evaluation in Schools of Nursing

Many and varied suggestions have been made as to the appropriateness of the proposed models of program evaluation for evaluating nursing programs. LaBelle and Egan (1975), Ediger et al. (1983) and Marriner, Langford and Goodwin (1980) prefer the model originally proposed by Stake. Hedlund (1978) suggests using the decision-facilitation model. Horan, Knight, McAtee and Westrick (1984) suggest faculty devise a unique model to conform to the program's unique characteristics whereas Friesner (1978) suggests an eclectic approach which takes certain aspects of each proposed model and fashions them into a holistic design consistent with the unique features of the program in question. Wakim (1983) outlines an evaluation plan or design, neglecting to identify an underlying model of evaluation, and Hauf (1981) suggests we use key factor analysis within Stufflebeam's proposed model of program evaluation. Bevis (1983) maintains the most common and
useful way to proceed with program evaluation in nursing schools is to tie evaluation directly to objectives, because a nursing program is based on objectives which flow from the school's philosophy and objectives.

Freeman (1977) reminds us that program evaluation is not merely an activity carried out by social science enthusiasts, but rather is a political decision-making tool. Adding to this philosophical belief, Veney and Kaluzny (1984) state there is a tendency to make evaluation in the health sciences more difficult and nebulous than it need be. These authors go on to describe evaluation as a process whose basic thrust is central to the managerial process and whose application is often intuitive in nature.

The World Health Organization (1981) considered program evaluation and defined it as the determination of a program's relevance, progress, efficiency, effectiveness and impact. Relevance refers to the degree to which the program met the needs or service demands of the community. Progress refers to the degree to which the program's implementation is consistent with the developmental plan. Efficiency refers to the cost of the program in light of the programmatic output. Effectiveness refers to the degree to which the program satisfied the predetermined objectives. Impact refers to the long-term effects of the
program (World Health Organization, 1981). Veney and Kaluzny (1984) incorporate these aspects of program evaluation into the management cycle in order to demonstrate that evaluation occurs during all phases of management. Instead of seeing evaluation as a linear process proceeding from planning to implementation to evaluation, with an evaluation feedback loop to both the planning and implementation stages, these authors describe program evaluation as a nonlinear process incorporated with the major activities of management. Planning, implementation and control, the three activities of management, are seen as three interconnected activities for the manager. During the planning stage, the manager is concerned with questions of relevance; during the implementation stage the manager is concerned with question of progress; during the control stage the manager is concerned with question of efficiency. Picturing these activities as three interconnected circles, the area in which all three activities overlap is seen as the area wherein the impact and effectiveness of the program must be addressed.

Shortell and Richardson (1978) distinguish between evaluation and evaluation research by indicating evaluation results are based on judgments of the evaluator whereas evaluation research results are based on the scientific
method. Veney and Kaluzny (1984) note that this
distinction often leads to the belief that evaluation per
se is simple as opposed to the more rigorous and serious
effort of evaluation research. In an effort to avoid the
differentiation between evaluation and evaluation research,
Rossi, Freeman and Wright (1979) propose the term
indicate has three specific characteristics:

1. Observations of a particular social program can be
duplicated by other observers using the same
instrument.

2. The results of a program are subject to tests of
whether they could have occurred in the absence of
the program.

3. Information is presented on whether program funds
are efficiently used. (p. 11)

Veney and Kaluzny (1984) state their belief that many
social scientists have the skills necessary to carry out
evaluations, whereas all health care managers do indeed
evaluate. Campbell (1969) maintains that this type of
perspective forces the manager to "shift from the advocacy
of a specific reform to the advocacy of the seriousness of
the problem, and hence to the advocacy of persistence in
alternative reform efforts should the first one fail" (p.
Veney and Kaluzny (1984) describe the involvement of the health care manager in evaluation as a continuum ranging from total domination by the manager to total domination by an external evaluator. Relevance and progress evaluations are manager dominated. Collaboration between the manager and the evaluator is necessary as one moves up the continuum toward evaluations focused on efficiency and effectiveness. Impact evaluation is dominated by a social scientist with expertise in evaluation methodology (Veney and Kaluzny, 1984).

In the first book to suggest a unified approach to evaluation for programs in nursing service areas as well as nursing education programs, Litwack, Line and Bower (1985) suggest using a systems approach to ongoing program evaluation. Initially proposed by von Bertalanffy (1968), general systems theory is concerned with a holistic approach to a discipline or organization of any type that enables identification and categorization of the various factions of the organizational whole. This whole is defined as a system. Systems are either open or closed, depending on their relationship to the environment. Open systems interact continuously with the environment, whereas closed systems are self-contained and experience no input from the environment, nor do they produce outputs into the environment. Once one has established the general nature
of the system, the subsystems or component parts must be identified. Any given system consists of a varying number of subsystems, and these subsystems carry out specific functions or tasks by which they can be identified (Baker, 1971). Litwack et al. (1985) maintain that for evaluation purposes, systems theory can be applicable to nursing education as a whole by using systems analysis. Systems analysis is the process of identifying the subsystems within any one system, and then relating these subsystems both to each other and to the system as an entire entity (Campbell, Bridges & Nystrand, 1983).

Litwack et al. (1985) state:
Systems analysis allows the nursing educator to develop a better understanding of the entire system by studying the behavior and interactions of its parts, just as nurses develop a better understanding of the human system by studying the behavior and interactions of the various subsystems of the body. With an understanding of the interrelatedness of the parts, evaluation of the system as a whole can be more easily carried out. (p. 18)

Stone (1978), describing an evaluation model developed for a baccalaureate nursing curriculum project at the University of Wisconsin in Madison, sees evaluation as
self-management and proceeds to apply several basic principles of self-management to the development and implementation of the proposed evaluation model. Emphasizing that the faculty members who are responsible for planning and implementing nursing education programs are also responsible for designing and implementing a systematic plan of ongoing program evaluation, Stone (1978) develops an evaluation model based on the principles of self-management as well as assumptions about the basis of a nursing education program.

Nursing has established a set of credentialing mechanisms designed to guarantee that a specific caliber of professional care can be maintained throughout the country. Included in these mechanisms are the licensure and certification of health agencies and health professionals. The credentialing mechanism designed to assure the quality of educational preparation of the nurse is accreditation.

In addition to the decisions inherent in program evaluation in general, the nurse educators striving for assurance and accountability for quality nursing education must strive to design and implement program evaluation so as to be congruent with the accreditation model of program evaluation (Walsh, 1975).

Stone (1978) points out that, in spite of the various models proposed for program evaluation in nursing
education, nurse educators continue to gather data in an unorganized manner without conceptualizing the process of evaluation. Torres (1975) suggests the reasons for the unorganized manner in which program evaluation has been carried out in nursing may be a lack of measurement skills, insecurity, and a general fear of the evaluation results on the part of the nursing faculty. Lynch (1978) adds that faculty's lack of experience with evaluation, as well as faculty turnover, lack of documentation skills, and general lack of planning contribute to the sporadic attempts at program evaluation in nursing education.

The Accreditation Model of Program Evaluation

Millard (1984) defines accreditation as the "primary communal self-regulatory means of academic and educational quality assessment and enhancement" (p. 451). This author goes on to state accreditation is a condition, a process and an activity. As a condition, accreditation is a status granted to an institution or program by its peers, indicating the program or institution has satisfied stated criteria considered required for educational excellence. As a process, accreditation both speaks for the quality of the institution or program, and assists with the further improvement of educational endeavors within the program or
institution. As an activity, accreditation consists of the members of the academic and professional communities working together to establish criteria, to assess their own institution or program in light of these criteria, and to offer judgment and guidance as peers qualified to determine educational quality (Millard, 1984).

Currently, nine regional bodies and four national associations assume responsibility for the institutional accreditation activities throughout the country. The regional bodies consist of: New England Association of Schools and Colleges; Middle States Association of Colleges and Schools; North Central Association of Colleges and Schools; Northwest Association of Schools and Colleges; Southern Association of Colleges and Schools; and Western Association of Schools and Colleges. In addition, the Southern and New England associations have occupational commissions, and the Western association has a community and junior college commission. The four national associations involved in institutional accreditation are: American Association of Bible Colleges; Association of Independent Colleges and Schools; National Association of Trade and Technical Schools; and National Home Study Council (Young, 1983).

When institutional accreditation is granted, a college or university as a total entity has met prescribed
standards. This procedure is in contrast to specialized or programmatic accreditation, which is designed to recognize the quality of an individual program of study that may or may not be housed within a college or university. Specialized accreditation is usually granted by professional associations holding claim to the expertise required for the evaluation of a given field of study (Christiansen, 1985).

Classified as the personal judgment model by Worthen and Sanders (1973), a value-oriented evaluation study by Stufflebeam and Webster (1980), and a complex evaluative tool by Young (1983), accreditation is also seen as totally separate from the concept of program evaluation (Trivett, 1976).

Although Thrash (1979) states accreditation is now the object of considerable attention in the educational arena as well as within the public sector, both Kells (1972) and Young (1979) maintain that accreditation is not truly understood within the domain of education, much less by the general public.

Huffman (1982) sees the primary role of accreditation as that of institutional reinforcement and assurance regarding the maintenance of educational integrity. Trivett (1976) views accreditation merely as a stepping
stone to eligibility for federal funding for institutions of higher education. Young (1979) states that accreditation "is expected to (and does) evaluate and assure the educational quality of everything from a one-man school of welding to a statewide system of postsecondary education, from institutions that operate campuses across the world to institutions that have no campuses at all" (p. 134). Stufflebeam (Brandt, 1978) maintains that accreditation does not work, is very costly and does not provide useful answers. Pfnister (1979) marvels that accrediting, as such, has changed so little considering the drastic change in the size and composition of the American educational enterprise.

The criteria established by the various accrediting agencies have been the subject of discussion since the beginning of the accreditation movement. Some say the criteria fail to relate in any respect to the educational achievements of the students (Stufflebeam, 1974), while others question the relationship between criteria of the various accrediting agencies and institutional quality (Troutt, 1979). In order to address the many critics who refer to the heavy use of intrinsic rather than extrinsic criteria within the accreditation model of program evaluation (Stufflebeam, 1971; Worthen & Sanders, 1973; House, 1978; Anderson & Ball, 1978), Astin (1962) designed
longitudinal research methods to demonstrate that most output measures depend more on the quality of the students admitted to the institution than on the functioning of the institution or the quality of its offerings. Astin (1982) adds that unless output measures are viewed in relation to students' potential at admission, they may be misleading indicators of institutional quality.

Young (1979), then president of the Council on Postsecondary Accreditation (COPA), responded to critics on the issue of intrinsic versus extrinsic criteria by stating that greater attention would be given to educational outcomes in the total accreditation process. Four years later, Chambers (1983) maintained that one of the two types of criteria used by accrediting agencies is "output criteria, and they attempt to measure the competencies actually acquired by the students in the program by examining employability of graduates, success on licensing exams, and other life and career skills" (p. 30).

Another area of controversy concerning the accreditation process is the use and composition of the site visiting team. Most of the criticism has centered on the elitist nature of the process and has implied the possibility for an "old boy" network (Koerner, 1971). In addition, there are questions about the age of the team
members, the apparent heavy use of institutional administrators on visiting teams, as well as a disparity between the characteristics of the visitors' home institutions and those of the visited institutions (Kirkwood, 1973; Koerner, 1975). One of the comments often raised about the accrediting agencies concerns possible laxity and preferential treatment in the time period allowed between site visits (Kells, 1972). In a three year study of one region, Kells (1979) investigated the characteristics of the evaluation team members of all initial and reaffirmation team visits conducted for the Middle States Association Commission on Higher Education. In his later study, Kells (1979) determined that the time period since the last accreditation visit averaged between six and seven years for all institutions visited. The presence of any intervals greater than ten years had been eliminated by 1976-1977, and Kells could find no preferential treatment for any category of institution. The age profile of team members changed during the six year period studied, with the members under 50 climbing from 27 to 45 percent and the over fifty age group decreasing accordingly. Kells (1979) also found no evidence of an "old boy" influence, determined that administrators did, indeed, account for about two-thirds of the teams' membership, institution presidents accounted for only 10 to
12 percent of the visiting members, and the data indicated a fair amount of congruence between visitor characteristics and characteristics of the visited institution.

The self-study required of the program or institution as a component of the accreditation process has received little criticism, probably because it has been accepted and used for many years throughout the higher education community (Macpherson, 1979). Burns (1960) would like to see the self-study used by the accrediting agency as the measurement tool for the program that prepared it; rather than measuring each program against the national standards, the standards could be the perception of the program's own officials as to what the program is and what it should be. The cost of the self-study is a concern (Macpherson, 1979; Armstrong, 1981), as is the apparent lack of evaluative skills on the part of faculties (Hall, 1979; Millard, 1983). When the self-study component of the accreditation process is mentioned, however, the advantages of self-evaluation are seen as clearly out-weighing the disadvantages (Armstrong, 1981; Burns, 1960; Hall, 1979; Macpherson, 1979; Millard, 1983).
The history of medical education provides a good example of the development of specialized accreditation. During the nineteenth century, it was common for medical education to take place in proprietary settings where little or no instruction was provided in basic or clinical sciences and limited opportunity existed for the application of scientific theory (American Medical Association, 1983).

The wide variability that existed in the preparation of individuals who held a medical degree prompted the American Medical Association (AMA), along with the Carnegie Foundation, to commission a study of the existing educational practices within schools of medicine. The resultant report, known as the Flexner report, severely criticized medical education in this country and advocated the adoption of minimal educational standards, termed "essentials." When medical schools were surveyed to determine their adherence to these standards, specialized accreditation in medicine was a reality (Selden, 1960). Developments in the health professions have tended to emulate medicine, and the birth of specialized accreditation is no exception. By the late 1920s, dentistry, nursing, and optometry had established
educational criteria as well as both visiting and listing activities (Selden and Porter, 1977). The 1980-82 Guide to recognized accrediting agencies, published by COPA includes thirty-nine recognized specialized or programmatic accrediting agencies (Peterson, 1980).

COPA (1982) describes specialized accreditation, in general, as it exists today:

A specialized accrediting body focuses its attention on a particular program within an institution of higher education. The close relationship of the specialized accrediting body with the professional association for the field helps insure that the requirements for accreditation are related to the current requirements for professional practice.... Specialized accreditation encourages program improvement by application of specific accreditation requirements to measure characteristics of a program and by making judgments about the overall quality of the program. For a non-accredited program, the accreditation requirements serve as specific goals to be achieved. In addition to accrediting standards, assistance for program improvement is provided through the counsel of the accreditation visiting team members, which include practitioners of the
profession and experienced and successful faculty
members and administrators in other institutions.
(pp. 5,6)
Millard (1984) adds that in general, specialized
accreditation originates in and applies to those
disciplines that prepare individuals for particular
occupational or professional fields in which there is a
recognized first professional degree or entry level. These
fields, Millard (1984) adds, tend to be areas where issues
of public welfare, health, safety, and need for assurance
of professional competence are matters of academic,
professional and public concern. In order to achieve this
outcome, the objectives that define the quality of
education must be defined cooperatively by the educational
and professional communities involved (Millard, 1984).
Recognizing that the quality of the nursing profession is,
to a great extent, a function of the quality of nursing
education, Millard (1984) also recognizes that specialized
accreditation is not simply a method of quality assessment,
but is also a process of quality enhancement.

The National League for Nursing (NLN) is the
officially recognized agency for the specialized and
professional accreditation of nursing education programs
throughout the country.
The process of accrediting a nursing program consists of six stages. The first stage begins when the school or program initially decides to apply for accreditation status.

Eligibility for application is determined by the following criteria:

1. At least one class of student has completed or is nearing completion of the program.
2. The program has the appropriate approval of the state board of nursing.
3. The institution in which the program is housed must be legally authorized to grant the degree, diploma, or certificate to which the program leads.
4. The institution in which the program is housed must be appropriately recognized by its accreditation agency (Walsh, 1975).

Communication to the NLN the intention to request accreditation is the second stage of this accreditation process. At this time consultants are available to assist the program in interpreting and implementing the accreditation process (Walsh, 1975).

The third stage consists of self-evaluation. At this time the faculty, administration and students prepare a self-evaluation report which assesses the goals of the
program and evaluates the degree to which these goals are being achieved (NLN, 1983).

The accreditation site visit is the fourth stage of this accreditation process. A team of visitors is chosen for an on-site visit in order to verify, clarify and amplify the self-study report submitted by the faculty, administration and students of the program. The visitors are peers of the faculty and are chosen on the basis of their experience and competence in the type of nursing education program being reviewed. After making observations, meeting with administration, faculty and students, and reviewing records, the team of visitors prepares its report which is mailed to the NLN board of review on the same day it is read to the faculty and administration at the end of the on-site visit (NLN, 1983).

The fifth stage entails evaluation of a program in nursing by the board of review of the NLN. Using the self-evaluation of the program and the report of the visiting team as the basis for its evaluation, the board of review has the ultimate responsibility to determine accreditation status of the program in question. The options available to the board of review include that of granting, deferring, denying or withdrawing accreditation status (NLN, 1982).
Once accreditation status is determined, the continuing self-evaluation and ongoing programmatic improvement constitutes the sixth stage of accreditation in nursing education. When accredited, a program must continue to satisfy the criteria or make improvements in order to maintain its accreditation status (NLN, 1982).

The NLN accredits all the various types of nursing programs: practical nursing programs, associate degree nursing programs, diploma nursing programs, and baccalaureate and higher degree nursing programs, which includes graduate nursing programs at both the master's and doctoral levels. Each of these educational avenues within nursing has an educational council within the NLN. Each council has its own list of qualified accreditation site visitors, its own board of review and its own set of criteria for accreditation. The criteria for accreditation for the various councils are periodically revised and updated to reflect the changes within society, education and the health care delivery system. Members of the various councils (consisting both of agencies and individuals) consider and vote on all matters of the council, including any revisions to the existing criteria (Walsh, 1975).

As a preface to the criteria for the baccalaureate and higher degree programs (see Appendix A for a complete
listing of the criteria specific to baccalaureate schools of nursing), the NLN council of baccalaureate and higher degree programs (1983) identifies two purposes for the criteria:

1. To assist the program by serving as a guide to faculty in developing and improving educational programs and as a framework for self-evaluation.

2. To assist the accrediting body in the appraisal of educational programs in terms of the philosophy and the purposes of the program. (p. 1)

The criteria for this council are identified in terms of relevant components to be evaluated: the structure and governance of the program, the material resources available to the program, the policies of the institution and program, the faculty of the program, curriculum structure and content, and the evaluation of the program (Council of Baccalaureate and Higher Degree Programs, 1983).

Summary

This literature review has explored the various areas that relate to the domain of program evaluation in schools of nursing.

Initially, the literature relevant to program evaluation in general was discussed. During this
discussion the emphasis centered on the various models proposed throughout the literature as well as the value of using a model of program evaluation.

The literature specifically addressing program evaluation in schools of nursing was then explored. The many and varied evaluation models proposed for schools of nursing were identified. The popular opinion that the process of program evaluation in schools of nursing warrants attention was then presented.

Because it is acknowledged that schools of nursing desiring to attain or maintain accreditation status must understand and adhere to the accreditation model of program evaluation, the literature pertinent to this model was explored as well as the advantages and disadvantages of accreditation.

The specialized accreditation process for schools of nursing was then presented, with an emphasis on the NLN, the officially recognized agency for the specialized and professional accreditation of nursing education programs.

This review of the literature is seen as a necessary foundation for understanding the need for a descriptive study regarding the prevailing practices in program evaluation in baccalaureate schools of nursing, the need for a model that incorporates both the essence of the emphasis from the NLN criteria for accreditation and the
recommendations from the literature on program evaluation, as well as an application of the proposed model.

It is difficult to address the needs of those involved in program evaluation in nursing education without first describing prevailing practices and, on that basis, inferring needs.

Once needs have been identified, a model of program evaluation that addresses those needs in terms that will capture the requirements of the specialized accrediting agency for nursing as well as the recommendations from the literature on program evaluation will be in order.

Having proposed a model for program evaluation in schools of nursing, a presentation of that model's application will provide the nurse educator with one example of the model's relevance and usefulness for organizing and constructing program evaluation in schools of nursing.
Program evaluation in baccalaureate schools of nursing:
Prevailing practices

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SECTION I. PROGRAM EVALUATION IN BACCALAUREATE SCHOOLS OF NURSING: PREVAILING PRACTICES

Introduction

Evaluation and accountability have become two of the most commonly used words in the literature of higher education today, and nursing education programs within those institutions are no exception. State legislatures and institutional governing bodies are demanding evidence of cost effectiveness, while students, alumni, accrediting bodies, employers, professional communities and health care consumers are demanding quality education, new alternatives to both education and health care delivery, as well as greater participation in matters previously considered professional and educational prerogatives (Friesner, 1978; Stone, 1978). Nursing education attempts to demonstrate accountability for these issues to all the pertinent audiences through the process of program evaluation.

Various models of program evaluation have been proposed throughout the literature of evaluation. Models, in general, are noted for providing direction and supplying an approach to a process (Reynolds, 1977). Although evaluation models differ, each serves the purpose of systematically organizing data to assist the evaluator with the choices among the various alternatives available in any
type of programmatic evaluation. While a model does not eliminate all the problems and frustrations of evaluation, it does make the process more manageable (Ediger, Snyder & Corcoran, 1983). A commonly used system of categorizing the existing models is proposed by Worthen and Sanders (1973) in their three category system consisting of judgmental strategies, decision-management strategies and decision-objective strategies.

In judgment strategy models, the evaluator makes judgments on the collected data. These judgments are presented to the decision-makers. There are two types of judgment strategy models: those based on extrinsic criteria and those based on intrinsic criteria. Extrinsic criteria require measurement of outcome data, or measurement of the graduate of the educational program, whereas intrinsic criteria require measurement of process data, or data concerning the educational process itself. Examples of judgment strategy models focusing on extrinsic criteria, are those of Stake (1967) and Scriven (1973). The accreditation model of program evaluation is usually the only example given of a judgmental strategy focusing on intrinsic criteria.

The emphasis of the evaluation in the decision-management models is to gather data and describe the circumstances and findings to the decision-makers, thereby
presenting the decision-makers with the responsibility for determining both the judgments and the decisions resulting from these judgments. The model proposed by Stufflebeam (1968) is such a model.

The decision-objective models are directed toward determination of the degree to which the stated program objectives have been achieved. The models suggested by Tyler (1949) and Metfessel and Michael (1967) are classic examples of this model.

Many and varied suggestions have been made as to the appropriateness of the proposed models of program evaluation for evaluation of nursing programs. LaBelle and Egan (1975) Ediger et al. (1983) and Marriner, Langford and Goodwin (1980) prefer the model proposed by Stake. Hedlund (1978) suggests the decision-facilitation model, whereas Hauf (1981) proposes the use of key factor analysis within Stufflebeam's proposed model. Bevis (1983) maintains the most common and useful way to proceed with program evaluation in nursing is to tie evaluation directly to objectives, thereby directing us toward the decision-objective models.

In contrast to a model, an evaluation plan is the design for collecting the information needed for an evaluation. A workable program evaluation plan, which may or may not be based upon an appropriate model, usually
contains the following components: the broad areas of the program to be evaluated; the person or group responsible for this area of the evaluation; the evaluation tool or source to be utilized; the documentation source for the necessary information; and the deadline date for that area of the evaluation. The particular model used, as well as the demands of the various audiences for the evaluation, may understandably alter the specific components found within the individual plan (Ediger et al., 1983).

A review of the pertinent literature by these authors revealed the absence of a summary or collective review describing the state of the art of program evaluation in nursing education. The need for accountability and evaluation is recognized and the singular value of several models for program evaluation is addressed. However, prevailing practices as to the use of program evaluation models as well as the design of the plan for program evaluation in schools of nursing have not yet been described.

Another concern to these researchers is the inclusion of the accreditation model as one option among the models of program evaluation. Although described as a viable model by most prominent authorities on the subject, accreditation is more easily seen as a condition, a process and an activity, rather than a conceptual structure that
guides the development of an evaluation (Millard, 1984). Viewed as an evaluation model, it is possible the nursing faculties involved do not conceptualize the systematic process of program evaluation to be other than a series of assigned tasks related to the appropriate criteria to be addressed. This misconception that accreditation can fulfill the role of an evaluation model may lead to a lack of understanding of the evaluation process itself. In this way it is possible the faculty members perform the assigned evaluative tasks without ever visualizing or understanding the overall process of program evaluation.

The purpose of the present study was to describe the prevailing practices of program evaluation in baccalaureate schools of nursing, including ascertaining the relationship between accreditation criteria and the process of program evaluation. This description was based on the models and plans for program evaluation in evidence within the sampled schools of nursing.

Materials and Methods

A sample of 75 baccalaureate schools of nursing, accredited by the National League for Nursing, was randomly selected for inclusion in this study. An invitation to participate was mailed to the Dean or Director of each school informing her of the nature of the study and
requesting a copy of the systematic program evaluation plan used in their school as well as any supporting materials they may have regarding the evaluation model used or developed by the nursing faculty. Due to the need for follow-up requests, the participants were not promised anonymity, but were assured data would be reported in aggregate form only. Both the initial invitation and the follow-up reminder included a mail-back form with which the Dean or Director could request results of the study (see Appendixes B and C for initial invitation and follow-up reminder).

Results

Of the 75 schools selected to participate in the study, 36 (48%) responded after the initial request and one follow-up reminder. Each of the 36 schools requested results of the study.

Respondents: No Materials Submitted

Of the 36 responding schools, 18 failed to submit any materials or the materials submitted were not those requested. The rationale provided by these schools is presented in Table 1.
Table 1. Rationale for failure to submit requested materials

<table>
<thead>
<tr>
<th>N</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Stated in process of &quot;developing plan&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Stated in process of &quot;revising plan&quot;</td>
</tr>
<tr>
<td>2</td>
<td>Inappropriate materials submitted</td>
</tr>
<tr>
<td>2</td>
<td>No comments provided</td>
</tr>
<tr>
<td>1</td>
<td>Stated in process of &quot;developing model&quot;</td>
</tr>
<tr>
<td>1</td>
<td>Stated in process of &quot;reviewing mechanisms&quot;</td>
</tr>
<tr>
<td>1</td>
<td>Stated school closing</td>
</tr>
<tr>
<td>1</td>
<td>Stated plan modeled after Stufflebeam's model</td>
</tr>
<tr>
<td>1</td>
<td>Stated time not available to send materials</td>
</tr>
<tr>
<td></td>
<td><strong>18 total</strong></td>
</tr>
</tbody>
</table>

Because models and plans are described as different entities, the rationale provided by the schools not submitting materials were categorized in Table 1 using the exact terms provided by the schools involved. It is the belief of these authors that development and revision are two different activities occurring at two different phases in a process, and for this reason these terms are also presented in Table 1 as written by the schools.
It is interesting to note that of these 18 accredited programs, one-third (6) indicated they are in the process of "developing" a plan for program evaluation when an ongoing systematic plan of program evaluation is an important criterion for accreditation by the National League for Nursing. Another one-third (6) indicated they are currently using either a model or plan by stating they are "revising" the plan, "developing" a model, "reviewing mechanisms" or have a plan modeled after an existing model. It is, however, acknowledged that "developing" and "revising" may have been used hastily by the respondents and therefore were not intended to convey the meanings ascribed herein.

Respondents: Submitted Materials

The materials submitted by the remaining 18 schools are summarized in Table 2.

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Submitted Models and Plans Of the five program evaluation models submitted, four adhered to the decision-facilitation framework proposed by Stufflebeam while one was a modified form of the discrepancy model, an approach that combines the elements of the decision-management model
Table 2. Materials submitted

<table>
<thead>
<tr>
<th>N</th>
<th>Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Evaluation model and plan</td>
</tr>
<tr>
<td>12</td>
<td>Evaluation plan</td>
</tr>
<tr>
<td>1</td>
<td>Outline of evaluation procedures</td>
</tr>
<tr>
<td>18</td>
<td>total</td>
</tr>
</tbody>
</table>

with the emphasis of the decision-objective model (Hauf, 1981). In three of the plans based upon models patterned after Stufflebeam's approach, the application of the model was apparent in the structure or presentation of the plan. From the perspective of face validity alone, the remaining two plans could have been based upon any model or could have totally lacked an evaluation model as a basis for development.

The National League for Nursing has categorized the criteria for accreditation of baccalaureate and higher degree programs according to the following critical programmatic areas to be evaluated: structure and governance; material resources; policies; faculty; curriculum; and evaluation. Four of these five plans included evaluation of the relevant areas addressed in the
criteria. One of the plans did not include evaluation of established policies.

All five of these evaluation plans submitted with a supporting model identified the component of the program being evaluated, the scheduled time frame for that component of the evaluation and the method or source of data collection. While one of the plans was limited to these three areas, the other four included the individual or group responsible for the evaluation. Two of these four also elaborated on the process and expected outcome of each component of the evaluation. While one school's plan did not address the evaluation of school policies, the remaining four schools submitting plans based upon adopted or developed models appeared to address the relevant areas emphasized throughout the NLN criteria for accreditation.

Submitted Evaluation Plans Only  The 12 plans submitted without a supporting model were noted to differ considerably. All did identify the component of the program being evaluated as well as scheduled time frame for that component of the evaluation. While two of the plans were limited to these areas, others were more extensive and included such areas as individual or group responsible for this component of the evaluation, methods of data collection, methods of reporting results, etc.

In relation to addressing the critical areas
identified by the National League for Nursing's criteria for accreditation, 5 of the 12 plans (41.6%) included all the pertinent areas. One plan addressed evaluation of the curriculum only, while 6 others were noted to have omitted relevant areas addressed by the NLN criteria such as structure and governance or policies. Of the 12 schools submitting plans without a supporting model, therefore, 7 (58.4%) failed to include the emphasis from the accreditation criteria in the plan for program evaluation.

**Initial Non-respondents: Telephone Sample** Because of the small number of returns obtained in this study, it was considered necessary to contact schools who did not submit materials in order to identify the characteristics of the initial non-respondent group. A random sample of 20, selected from the initial non-respondents, were subsequently contacted by telephone and asked to discuss the rationale for their choosing not to participate in this study as well as to describe the model and/or plan of program evaluation currently in use in their program (see Appendix D for complete telephone instrument). Table 3 presents the rationale provided by these non-respondents as to their initial refusal to participate in this study.
Table 3. Initial non-response rationale from telephone sample

<table>
<thead>
<tr>
<th>N</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>&quot;Developing&quot; plan</td>
</tr>
<tr>
<td>6</td>
<td>&quot;Revising&quot; plan</td>
</tr>
<tr>
<td>2</td>
<td>Too extensive to mail</td>
</tr>
<tr>
<td>2</td>
<td>Forgot or disregarded</td>
</tr>
<tr>
<td>1</td>
<td>&quot;Developing&quot; model</td>
</tr>
<tr>
<td>1</td>
<td>Uncertain</td>
</tr>
<tr>
<td>20</td>
<td>total</td>
</tr>
</tbody>
</table>

All of the initial non-respondents contacted by telephone indicated they did have a plan for systematic program evaluation at some stage of development or implementation. With the exception of the one school currently developing a model of program evaluation, none of the initial non-respondents utilize or plan to utilize a model of program evaluation as a supporting structure for the plan of evaluation. The groups’ reported plans for evaluation appeared to vary considerably from that usually found in evaluation plans, with the variable to be evaluated and the indicated time frame the only commonalities. From descriptions provided verbally, one-
half (10) of these evaluation plans do not address all the areas suggested by the NLN criteria for accreditation.

Limitations and Implications for Future Research

The limitations of this study are seen as follows:

1. Of the 75 schools randomly selected to participate in the descriptive study, only 36 (48%) responded after the initial request and one follow-up reminder. Although additional information was obtained by way of a later telephone survey, this limitation cannot be overlooked because of the possibility of selection or response bias.

2. Terminology used when requesting materials from the sampled schools apparently was not accurately defined or clear to the reader. Of the 36 responding schools, 18 failed to submit any materials or the materials submitted were not those requested. Reasons given for not submitting requested information, such as "revising" materials or "developing" materials, may be an issue of definition of terms. The initial request, as well as the follow-up reminder may not have been clearly stated as to the exact nature of the requested materials.

3. Information obtained from the sampled schools was reviewed and categorized by the first author only. Investigator bias could exist.

4. Information obtained from the telephone survey is
more complete than that obtained through mailed responses due to the nature of the information exchange.

Program evaluation, in general, has been studied very little from an empirical standpoint. A thorough and rigorous descriptive study is in order so as to describe and define current practices in program evaluation throughout nursing education. Only in this way will we know where we are, so that eventually we may know what needs to be done to reach our goal of systematic and comprehensive program evaluation.

Discussion

The great majority of schools contacted, including original respondents and respondents to the telephone sample, were using a plan of program evaluation or were in the midst of revising their previously accepted plan. Of all schools responding, 78.5% were currently engaged in utilizing or revising such a plan. This figure is undoubtedly higher, as it is unknown to these researchers if those schools "developing" a plan in the initial survey actually have one in operation.

Of the 56 schools providing information for this study, only 5 (8.9%) indicated they were currently using a model of program evaluation to guide and structure
the process of systematic program evaluation.

It is quite apparent from this cursory examination that nursing faculties are attempting to combine the process of program evaluation with the critical areas identified by the National League for Nursing criteria for accreditation of baccalaureate and higher degree programs. It is obvious that those few schools who have developed or adopted a model of program evaluation have managed to integrate the critical areas of the criteria for accreditation with the process of program evaluation to a greater degree than have those schools who have no model to guide their evaluation procedures. The critical programmatic areas of the accreditation criteria seem to be incorporated well when the faculty has constructed a program evaluation plan from the foundation of a model, whereas those nursing faculties who have proceeded to implement ongoing program evaluation without benefit of a structural model tended to omit one or more of these critical areas suggested by the criteria of the accrediting agency.

When one reviews the pertinent literature, it seems evident that nursing education, in concert with the entire educational community, is well aware of the need to demonstrate accountability through the process of program evaluation. When one examines the prevailing practices of
program evaluation described here, it is apparent that a large proportion of nursing educators are attempting to implement an evaluation process without benefit of a underlying evaluation model. Such a model would provide a foundation or structure that could guide and facilitate systematic and comprehensive program evaluation for baccalaureate schools of nursing.

References


Program evaluation in baccalaureate schools of nursing: A model

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SECTION II. PROGRAM EVALUATION IN BACCALAUREATE SCHOOLS OF NURSING: A MODEL

Introduction

A descriptive study investigating prevailing practices in program evaluation in baccalaureate schools of nursing determined that of 56 schools contacted, all of which were accredited by the National League for Nursing, only five (8.9%) indicated they were currently using a model of program evaluation to guide and structure the process of systematic program evaluation. The results of this initial study also indicated that those five schools who were using a model of program evaluation utilized a more complete plan of program evaluation than did the other 51 schools. These five evaluation plans addressed the critical programmatic areas identified by the National League for Nursing accreditation criteria (structure and governance, faculty, curriculum, policies and resources) and contained more of the components usually found in an evaluation plan than did those plans not based on a model of program evaluation (Brady & Netusil, 1986).

Although nursing educators have attempted to demonstrate accountability through systematic program evaluation, it is generally recognized that program evaluation could be improved in the majority of schools of
nursing. Stone (1978) advises us that, in spite of the various models proposed for program evaluation in nursing education, nurse educators continue to gather data in an unorganized manner without conceptualizing the process of evaluation. Torres (1975) suggests the reasons for the unorganized manner in which program evaluation has been carried out in nursing education may be the lack of measurement skills, insecurity, and a general fear of the evaluation results on the part of nurse educators. Lynch (1978) adds that nursing educator's lack of experience with evaluation, as well as their lack of documentation skills and general lack of planning contribute to the sporadic attempts at program evaluation within nursing education.

It is our belief that the accreditation process, with its mandatory emphasis on the criteria for accreditation, may obscure the usefulness of a model of program evaluation for the nursing faculty rather than serve as a model in and of itself. On the other hand, incorporating the accreditation process into a model of program evaluation may facilitate program evaluation for nursing faculty.

It is our belief that the emphasis on external evaluators, recommended throughout the literature on program evaluation, may be confusing and appear not to be relevant to nurse educators. Nursing faculty, in actuality, are responsible for planning and implementing
ongoing and systematic program evaluation. Although it is recognized that program evaluation necessarily involves input from various sources, a model of program evaluation that acknowledges the process as the responsibility of the nursing faculty involved may appear to be more relevant and practical to nurse educators than a process that appears to be the responsibility of an external evaluator.

It is our belief that a model of program evaluation based upon a framework and process familiar to nurse educators may facilitate conceptual understanding by nursing faculty. Once a model is understood, conceptually, the probability should increase that it will be utilized to structure and guide the process of program evaluation.

As a result of the findings from the descriptive study of program evaluation throughout baccalaureate nursing education, as well as the beliefs identified above, a model of program evaluation for baccalaureate schools of nursing is proposed.

The Model

The model of program evaluation we propose is based on systems theory, the management process, and the emphasis from the National League for Nursing accreditation criteria specific to baccalaureate and higher degree programs.
Modification for programs in other Councils of the National League for Nursing will be discussed following presentation of the model itself.

Veney and Kaluzny (1984) suggest incorporating program evaluation into the management cycle in order to demonstrate that evaluation occurs during all phases of management. Rather than looking at program evaluation as simply an "ongoing" process, these authors suggest we look at program evaluation as a component of program management and therefore as part of the process of planning a program, of implementing a program, and of judging the outputs of a program.

Litwack, Linc and Bower (1985) suggest using a systems approach to ongoing program evaluation. Initially proposed by von Bertalanffy (1968), general systems theory is concerned with a holistic approach to a discipline or organization of any type, and is as familiar to the nurse educator as is the management process.

The National League for Nursing has categorized the criteria for accreditation of baccalaureate and higher degree programs into the following critical programmatic areas: structure and governance, policies, faculty, curriculum, resources and evaluation. The descriptive study described earlier indicates nurse educators in baccalaureate schools of nursing are attempting to
incorporate these programmatic areas into their plan of program evaluation.

It is our intent to combine the management process, general systems theory and these critical programmatic areas identified by the criteria for accreditation into a model of program evaluation that will be readily understood by the nurse educator.

Planning

The model begins with the planning system of a new program.

![Planning System Diagram]

Figure 1. Planning system and evaluation

The input into the planning system for a new program is seen as the needs assessment, also known as the output.
from the evaluative research directed toward determination of the needs of the audiences for the particular program. Once these needs have been identified and articulated, they become the input into the planning system for the new program in question. If, however, the program is ongoing in nature, the input would be in the form of the needs assessment that is the output from evaluation of the planning, implementation or product of the program.

The planning system is seen as an open system, continually interacting with the external environment. As with other open systems, there is a continuous exchange of information, material and energy between the system and the external environment, or all that is NOT the system. This exchange is indicated by the two-headed arrows between the environment and the system. The external environment of the planning system includes the university or college community, the nursing community, the local community being served by the program, and society in general.

The sub-systems of the planning system consist of the critical areas identified by the National League for Nursing's categorization of the criteria for accreditation of baccalaureate and higher degree programs. As with any other open system, any influence on the system as a whole will impact each of the sub-systems, and any change or
alteration in any one of the sub-systems may influence the remaining sub-systems and therefore the stability of the system as a whole. The two-headed arrows between the sub-systems in Figure 1 reflect this inter-dependence of the sub-systems.

The planning system, operating on the basis of the input from the needs assessment, the mutual interaction of the sub-systems and the continual interaction with the external environment, results in output known as the plan for the program in question. Once this output is identified as a tangible product, evaluation of the planning system is in order.

During the evaluation of the planning system, the relationship of the plan to the needs assessment must be measured, the relationship of the sub-systems to each other and to the identified needs must be articulated, and the congruence between the plan and the workings of the sub-systems must be identified. In order to address these areas, the authors suggest the following questions be asked:

What sub-systems are needed, and why?

What is the projected relationship between the program and the external environment?

Does the plan address the identified needs?
The evaluation of the planning system is a major decision point for the nursing faculty. If the faculty decides there is a major discrepancy between the plan and the identified needs, this evaluation will necessarily lead the faculty back into the planning system, using the evaluation data as the new input for the planning system. This optional route is indicated by the dotted line in the model.

**Implementation**

If, however, the evaluation demonstrates that the plan does address the identified needs and the sub-systems as structured can produce the identified plan, this plan, or output from the planning system, joins incoming students and available resources to become input into the implementation system pictured in Figure 2.

---

*Insert Figure 2 about here*

---

The input into the implementation system is seen as the developed plan in addition to entering students and resources available to the program.

As with planning, the implementation system is seen as an open system, continually interacting with the external
environment in an exchange of material, energy and information. The external environment for this system is identical to that for the planning system.

The sub-systems of the implementation system also consist of the critical areas identified by the National League for Nursing's categorization of the criteria for accreditation of baccalaureate and higher degree programs. These sub-systems are related to each other and to the system in the same way the sub-systems of planning are
related to each other and to the planning system.

Once the program is in operation, nursing faculty need to evaluate the effectiveness of the implementation system. This is known as evaluation of the process, sometimes referred to as formative evaluation, as we are not yet looking at the product of the educational program. Following implementation of the program, the relationship of the implementation sub-systems to the various inputs as well as to each other must be evaluated. In order to address these areas, the authors suggest the following questions be asked:

What are the inputs?
Are the inputs timely and sufficient?
What are the sub-systems?
Are the sub-systems timely and sufficient?
What is the relationship between the program and the external environment?
Is the program proceeding as planned?

This evaluation of the process is also a major decision point for the nursing faculty. If the faculty determines there is a major discrepancy between the implemented program and the planned program, this will lead the faculty back into the planning system, using this data as the new input for the planning system. As with the evaluation of
the planning system, this optional route is indicated by a dotted line in the model.

**Product**

If however, the evaluation demonstrates that the implementation does process the inputs as planned and the implementation sub-systems relate to each other as planned, the next step of program evaluation is seen as evaluation of the product.

The output from the implementation system is seen as the graduates as well as those individuals who did not finish the program.

![Diagram](input into planning system)\[\overrightarrow{\text{Graduates}}\overrightarrow{\text{evaluation}}\overleftarrow{\text{Attrition}}\rightarrow\overleftarrow{\text{External Environment}}\]

Figure 3. Product evaluation

Once it has been determined that the program is being implemented as planned, it is then appropriate to evaluate the effectiveness of the program by examining the output,
or evaluating the graduates as well as those who did not complete the program. This product evaluation, sometimes referred to as summative evaluation, explores the relationship of the implementation sub-systems to the output, the relationship of the output to the external environment, and the relationship of the output to the implementation system's input. In order to address these areas, the authors suggest the following questions be asked:

What are the outputs?
Are the outputs timely? Sufficient?
What is the relationship between the outputs and the external environment?
How can the outputs be improved?

The final question posed above is critical and must be asked: how can these outputs be improved? Only by addressing this question is the faculty directed toward the planning system to plan the alterations necessary to improve the products.

Prior to entering the planning system, however, the faculty needs to pause and reflect upon the merits and values of their program evaluation, including the model and plan they utilized, in order to evaluate this process in relation to the goals of their program. At this time the
faculty judges the evaluations they have carried out and makes any necessary changes in the program evaluation structure or procedures in order to better conform to the needs and goals of their individual program.

Ideally, it is at this time that an external evaluator also judges the merit or worth of the evaluations. An objective evaluation of the program evaluations carried out by the faculty are routinely performed by the National League for Nursing as well as the regional accrediting body for colleges and universities and would serve well to provide the faculty with an external judgment as to the value of their evaluation efforts. On the other hand, it is recognized that such external evaluators will not be available each time the faculty has completed evaluating the product of the program. When possible, it would be beneficial to the faculty to obtain an objective, informed, and yet external opinion as to the worth or merit of their program evaluation efforts and results following evaluation of the product.

The complete model we propose, one that identifies the evaluations of planning, implementation and product, is pictured in Figure 4.

Insert Figure 4 about here
Figure 4. A model of program evaluation for schools of nursing.
This evaluation model is seen as cyclic. Major decisions must be made at three places within the model. The first two decisions may lead the faculty back to the planning system, depending on the findings, but the evaluation of the product will always lead the faculty back to the planning system based on the assumption that the product can always be improved, either by increased quality or increased cost effectiveness.

Traditionally when various audiences request a program evaluation of nursing faculty (i.e., National League for Nursing or the university community) they are usually referring to a summative evaluation of the process and/or the product. It has been our experience that nursing faculty see these two evaluations, without a feedback loop to the planning system, as sufficient for systematic and comprehensive program evaluation. This misconception on the part of nursing faculty may be a contributing influence to the unorganized manner in which nurse educators gather evaluative data and may help explain the common fear of evaluation results on the part of nursing faculty. Once nursing faculty conceptualize the entire evaluation process, which must necessarily include planning preceding and following evaluation, it is hoped these problems may be resolved.
Validation of the Model

Litwack, Linc and Bower (1985) inform us that, in order to be effective, the particular model chosen for program evaluation should have the following features:

1. Clarification of objectives of the evaluation.
2. Definition of the role of the evaluator and relationship to administration.
3. Statement of assumptions underlying the evaluation.
4. Clarification and acknowledgment of decisions resulting from evaluation.
5. Development of a design for conducting the evaluation.
6. Application of judgment as to the merit or worth of the evaluation.
7. Identification of the feedback mechanism (p. 38).

In an attempt to validate the proposed model, we compared our model with these suggested features. Our findings will be discussed in the order of the seven features listed above.

Clarification of objectives of the evaluation.

Acknowledging the need to address individual programmatic variances, the objectives of the evaluations
in this model are seen as follows:

Planning

To determine relationship between identified needs and developed plan
To determine relationship between plan and sub-systems
To determine relationship among sub-systems

Implementation

To determine relationship between implementation inputs and sub-systems
To determine relationship among sub-systems

Product

To determine relationship between product and implementation sub-systems
To determine relationship between product and external environment
To determine relationship between product and implementation inputs
To identify how product can be improved

Definition of the role of the evaluator and relationship to administration.

Each program using this model would need to identify the relationship between the evaluator (the nursing faculty and nursing administration) and the administration of the
controlling institution. This information is easily articulated from organizational charts of the institution, in addition to knowledge of operating functions within the institution.

Statement of assumptions underlying the evaluation.

The assumptions underlying this model are as follows:

1. The accreditation process, incorporated into a model of program evaluation will facilitate program evaluation for nursing faculty.

2. The categories of the criteria for accreditation by the National League for Nursing are a complete set of the programmatic areas to be examined during program evaluation.

3. Program evaluation in a school of nursing is the responsibility of the administration and faculty of that school.

4. Outputs of educational programs can always be improved in terms of quality or cost effectiveness.

It is recognized that any collective assumptions on the part of nursing faculty, as a result of individual programmatic concerns, would need to be identified prior to proceeding with any one of the evaluations depicted in this model.
Clarification and acknowledgment of decisions resulting from evaluation.

The decisions on the part of the faculty are generally outlined in this model. Once evaluation has been carried out, articulation of the findings will direct the faculty to the next step in the model, be that back to planning or onward through the model. The major decision points in this model, therefore, are located at the conclusion of each evaluation. The minor decisions inherent in every evaluation will be articulated through specific evaluation objectives and findings.

Development of a design for conducting the evaluation.

A design for conducting the evaluations outlined will need to be developed in order to operationalize this model. Based on the critical questions to be asked at each decision point in the model, and using the sub-systems and specific criteria as a general guideline, it is the intent of these authors to propose a specific design in a future article.

Application of judgment as to the merit or worth of the evaluation.

Once product evaluation has been completed, and prior to using these findings as input into the planning system,
the nursing faculty should step back and reflect upon the model and the usefulness of the evaluations to the goals of the program in question. It is also at this time that the faculty should consult an external evaluator regarding a judgment as to the merit or worth of their program evaluation, and restructure the process accordingly.

Identification of the feedback mechanism.

The feedback mechanisms of this model are the evaluation activities themselves in addition to the optional pathway back to the planning phase following evaluation of the planning and implementation systems. Evaluations, by definition, will provide information as to the value of the system or outputs. The major decision for the nursing faculty following the evaluation (whether to proceed through the model or return to the planning system) will demonstrate that feedback has been provided as to the adequacy of that particular system. The obligatory pathway back to the planning system following evaluation of the product requires utilization of feedback as to how the product can be improved.

In order to modify this model for diploma and associate degree nursing programs, as opposed to baccalaureate programs, the nurse educator is referred back to the second assumption underlying this
model which states: The categories of the criteria for accreditation by the National League for Nursing are a complete set of the programmatic areas to be examined during program evaluation. The sub-systems of the planning and implementation systems can easily be renamed to be congruent with the accreditation criteria categories identified by the relevant Council of the National League for Nursing without destroying the intent or integrity of the model.

It is our opinion that all too often nurse educators look upon program evaluation merely as a summative evaluation following the implementation of the program or the measurement of the product. Program evaluation in nursing education should be conceptualized as an ongoing, formative process directed toward program improvement, yet the nursing faculty's need to address the accreditation criteria may understandably alter the emphasis of program evaluation from formative to summative. This model of program evaluation makes it clear to the nurse educator that program evaluation can incorporate the steps necessary for the accreditation process and yet be conceived and carried out as formative evaluation following each step of program development and modification.

It is our belief that this model of program evaluation, based upon a framework and process familiar to
nurse educators, will facilitate conceptual understanding by nursing faculty and therefore eliminate the sporadic and unorganized attempts at program evaluation that are currently found within nursing education.

References


Program evaluation in baccalaureate schools of nursing:

Application of a model

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SECTION III. PROGRAM EVALUATION IN BACCALAUREATE SCHOOLS OF NURSING: APPLICATION OF A MODEL

Introduction

A descriptive study investigating prevailing practices of program evaluation in baccalaureate schools of nursing determined only 8.9% of the National League for Nursing (NLN) accredited schools sampled were currently using a model of program evaluation to guide and structure the process of systematic program evaluation (Brady & Netusil, 1986a).

In an effort to facilitate the process of program evaluation for nursing faculty, a model of program evaluation has been proposed in a previous article (Brady & Netusil, 1986b). Based on the findings from the descriptive study as well as beliefs and assumptions on the part of these researchers, the proposed model incorporates systems theory, the management process and the emphasis from the criteria for accreditation of baccalaureate and higher degree programs by the National League for Nursing. Although presented here in visual form, a complete discussion of the model can be found in the earlier article.
Figure 1. The Model
Litwack, Linc and Bower (1985) inform us that, in order to be effective, a particular model chosen for program evaluation should have several features. One of these necessary features is the development of a design for conducting the evaluation based upon the chosen model. It is our intent here to describe a design for program evaluation, based on the proposed model and specific for a new baccalaureate nursing program in a small liberal arts and sciences university in the midwest.

Background

The federal legislation of 1965, requiring program evaluation as one condition for the initiation and funding of new educational programs, stimulated both educators and evaluators to propose many different models of program evaluation. Models, in general, are noted for providing direction and supplying an approach to a process (Reynolds, 1977). These suggested models, sometimes referred to as theories, analytical plans, or frameworks, can assist the evaluator in structuring his or her thoughts and, therefore, his or her approach to the domain of program evaluation as well as to an approach for any specific evaluation.

In contrast to a model, an evaluation design is the plan for collecting the information indicated by the chosen
model. A traditional program evaluation design, based upon an appropriate model, may indicate the broad areas of the program to be evaluated, the person or group responsible for this component of the evaluation, the evaluation tool or source to be utilized, the documentation source for the necessary information, and the deadline date for that component of the evaluation. The particular model used, as well as the demands of the various audiences for the evaluation, may understandably change the specific areas identified within any individual plan (Ediger, Snyder & Corcoran, 1983).

The Program

The program in question is a new baccalaureate completion program located in a small liberal arts and sciences university in the midwest. Established as a program suitable for part-time as well as full-time students, it would appear the program is satisfactorily addressing a community need in that the enrollment exceeds initial predictions by more than 400%. Having admitted students for one academic year, it was deemed necessary to devise a plan for systematic program evaluation.

The relationship between the evaluators (the nursing faculty and nursing administration) and the administration
of the controlling institution is linear in nature. The nursing faculty report to the Director of the Division of Nursing, who in turn reports to the Dean of the College of Pharmacy and Health Sciences. The Dean of the College of Pharmacy and Health Sciences reports to the Provost, who in turn reports to the President of the university. It is necessary to note that the Dean advises the Director of the Division of Nursing in terms of resource management only. The Director of the Division of Nursing is responsible and accountable for the activities and production within the Division of Nursing. Although the Division of Nursing maintains autonomy for the activities and production within the Division of Nursing, the university community is one of the most important and demanding audiences of this program due to the current need for financial and resource retrenchment in higher education.

At the time of this writing, this faculty consists of three full-time faculty members, one part-time faculty member and the Director of the Division of Nursing who also assumes teaching responsibilities within the faculty.

The Plan

The plan designed for this program is structured according to the questions to be asked during each phase of the program evaluation. These questions were listed in an
earlier article (Brady & Netusil, 1986b). Following the presentation of the question, the plan is structured in a four column format that provides the faculty with specific suggestions as to how to address the broad evaluation questions and report the findings.

Each question is reduced to several behavioral components that are referred to as "charges" in the plan. Addressing each charge will therefore eventually result in addressing the broad question. The data source or tool is identified next to each charge in order to facilitate the retrieval or gathering of the necessary information. The third column identifies the manner in which to process and report the findings and the last column indicates any NLN criteria being addressed during this stage of the program evaluation.

Because of the small size of this faculty at present, it is understood that all evaluation activities will be assumed by the faculty serving as a committee of the whole. It is also understood that all evaluation activities will take place within the next twelve months in order to completely evaluate this new program. For these reasons this plan does not indicate the group or individual responsible for each component of the evaluation or the time frame in which to complete each section of the
evaluation, both common components of a systematic plan of program evaluation.

As with any systematic plan, this plan is posed in order to provide the faculty with structure and guidance throughout the program evaluation process, as well as demonstrate the operationalization of the proposed model. It is not the intent of these authors to indicate that this plan is inflexible or cannot be augmented, for to diminish the vision and creativity on the part of the faculty involved would be counterproductive to the process of program evaluation itself. This faculty, as well as any others who may choose to utilize the proposed model and adopt the format of the proposed plan, are encouraged to perceive this plan as a tool providing guidance as to minimal expectations when using this model of program evaluation.

Due to the length of the plan developed for this program, only selected excerpts will be provided here. The plan in its entirety may be obtained by writing the authors.

**Evaluation of the Planning System**

The plan for evaluation of the planning system, using the identified format based upon the proposed model, begins as depicted in Table 1.
Table 1. Excerpt from evaluation plan: Planning system

<table>
<thead>
<tr>
<th>Charge</th>
<th>Data</th>
<th>Process/Reporting</th>
<th>NLN Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe structure and governance needed with rationale.</td>
<td>Needs assessment and data.</td>
<td>Relate data to structure and governance.</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each remaining sub-system is addressed, in turn, in order to address this broad evaluation question. No NLN criteria are addressed during evaluation of the entire planning system.

Because this program is already fully operational, the planning system will not be the first evaluation carried out by this faculty, but rather will be evaluated following evaluation of the implementation system or evaluation of the product, depending on the findings from these evaluations. The plan for the program, developed prior to
implementing the program, will become an important source of information during evaluation of the implementation system.

Evaluation of the Implementation System

The initial evaluation to be carried out by the faculty of the program in question is the evaluation of the implementation system, oftentimes called formative evaluation or evaluation of the process. In this evaluation the nursing faculty is not judging the merit or worth of the educational product, but rather looking at the specific educational process in an attempt to determine the value inherent in the implementation system itself. It is during this evaluation that the NLN criteria for accreditation are addressed.

The excerpt from the plan for the implementation system begins to identify a charge to define policies, in order to addresses the evaluation question "What are the sub-systems?" Prior to this charge, the structure and governance and material resources have been defined.
Table 2. Excerpt from evaluation plan: Implementation system

<table>
<thead>
<tr>
<th>Charge</th>
<th>Data</th>
<th>Process/Reporting</th>
<th>NLN Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe</td>
<td>Faculty</td>
<td>Document faculty and student policies.</td>
<td>Faculty and student policies</td>
</tr>
<tr>
<td>policies</td>
<td>Student</td>
<td>Determine availability of faculty and student policies.</td>
<td>Determined available to those affected.</td>
</tr>
<tr>
<td></td>
<td>(Univ., College, Div.)</td>
<td>student policies.</td>
<td>Policies related to governance.</td>
</tr>
<tr>
<td></td>
<td>By-laws</td>
<td>Determine implementation of policies.</td>
<td>Policies related to governance.</td>
</tr>
<tr>
<td>of Div.</td>
<td>Minutes</td>
<td>Determine responsibility for and process development of the program are developed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>faculty</td>
<td>mtgs.</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation of the Educational Outcomes

Following evaluation of the implementation system, the faculty is directed either back to the planning system or onward to evaluate the educational outcome. Should the faculty determine, following the evaluation of the implementation system, that the process is not proceeding as planned, the evaluation data will then be used as needs assessment findings for input into the planning system. If the faculty determines the implementation system is proceeding as planned, however, they are then to evaluate the educational products, or outcomes, otherwise known as the graduates as well as the individuals who did not finish the program. This type of product evaluation is oftentimes referred to as summative evaluation. As with the evaluation of the planning system, no NLN criteria are addressed during the evaluation of the outcomes.

The plan addressing the evaluation system begins with the excerpt depicted in Table 3.

Discussion

It is recognized that this plan may, indeed, not differ from those traditionally found within accredited
Table 3. Excerpt from evaluation plan: Product evaluation

**Question:** What are the outputs?

<table>
<thead>
<tr>
<th>Charge</th>
<th>Data</th>
<th>Process/Reporting</th>
<th>NLN Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe graduates.</td>
<td>Graduate questionnaire</td>
<td>Identify characteristics of graduates. Use descriptive statistics.</td>
<td>None</td>
</tr>
<tr>
<td>Describe individuals who drop out.</td>
<td>Student files.</td>
<td>Identify characteristics of those who drop out. Use descriptive statistics.</td>
<td>None</td>
</tr>
</tbody>
</table>

schools of nursing, with one exception: the cyclic nature of the underlying model necessitates the processing of the planning system before and after process and product evaluation. For this reason, the faculty in this program will utilize the results of this product evaluation as
input into the planning system, if the findings of the earlier process evaluation indicates they are to move directly to product evaluation rather than input the planning system at that point.

This type of a program evaluation plan is only as good as the model upon which it is based and the degree to which the involved faculty adhere to the model. Once the model is understood and accepted by a faculty, the design of a specific plan tailored to the needs of the individual program is merely an exercise in operationalizing the model to fit the unique characteristics and audiences of the particular program.

References


SUMMARY AND DISCUSSION

Summary

The present study was designed for several purposes: to describe prevailing practices in program evaluation by baccalaureate schools of nursing throughout the country; to present a model of program evaluation for nursing education that incorporates the essence of the emphasis from the specialized accrediting body for nursing as well as recommendations from current literature pertinent to program evaluation; and to describe an application of the proposed model into an actual evaluation plan for a baccalaureate program in nursing.

Although the need for accountability is well documented throughout the literature of nursing education, the use of a model of program evaluation to provide the direction necessary for the plan of program evaluation is neither universally documented nor universally recognized throughout the discipline.

A review of the literature explored various areas that impact upon the domain of program evaluation in schools of nursing. Several of the available models of program evaluation were described. The value of using a model to structure the program evaluation process was explored. The models of program evaluation proposed for use in schools of
nursing were identified and the opinion that the process of program evaluation in schools of nursing deserves attention was then presented. The literature relevant to the accreditation model of program evaluation was also explored, due to the need for schools of nursing to incorporate this emphasis into their program evaluation process. Finally, the specialized accreditation process for schools of nursing was discussed, with an emphasis on the National League for Nursing, the officially recognized agency for the specialized and professional accreditation of nursing education programs.

The remainder of this dissertation was presented in the form of three articles suitable for publication in a professional journal of nursing, Nursing and Health Care, published by the National League for Nursing.

The first article described prevailing practices for program evaluation in baccalaureate schools of nursing. Based on data received from 56 of 75 schools randomly selected throughout the country, it was determined that a large proportion of nursing educators are attempting to implement a program evaluation process without benefit of an underlying evaluation model. It was also determined that nursing faculties are attempting to combine the process of program evaluation with the National League for
Nursing's criteria for accreditation of baccalaureate and higher degree programs.

The second article presented a model for program evaluation in baccalaureate schools of nursing. The proposed model was based on systems theory, the management process, and the emphasis from the National League for Nursing accreditation criteria specific to baccalaureate and higher degree programs.

The third article presented selected excerpts from an evaluation plan based on the proposed model of program evaluation. The evaluation plan, specific for a new baccalaureate completion program in a small liberal arts and sciences university in the midwest, is an attempt to demonstrate application of the proposed model as well as to operationalize the concepts inherent within the model.

Limitations

The limitations of this dissertation are seen as follows:

1. Of the 75 schools randomly selected to participate in the descriptive study, only 38 (48%) responded after the initial request and one follow-up reminder. Although additional information was obtained by way of a later telephone survey, this limitation cannot be overlooked
because of the possibility of selection and/or response bias.

2. Terminology used when requesting materials from the sampled schools apparently was not accurately defined a priori. Of the 36 responding schools, 18 failed to submit any materials or the materials submitted were not those requested. Reasons given for not submitting requested information, such as "revising" materials or "developing" materials, may be an issue of definition of terms. The initial request as well as the follow-up reminder may not have been clearly stated as to the exact nature of the requested materials.

3. Information obtained from the sampled schools was reviewed and categorized by the first author only. Investigator bias could exist.

4. Information obtained from the telephone survey could be more complete than that obtained through mailed responses, due to the nature of the information exchange.

5. The critical questions to be asked with each evaluation in the proposed model may not be valid or reliable.

6. The proposed plan, as well as the proposed model, was developed without input from the faculty members involved in the program cited.
Discussion

Although the limitations of this work deserve consideration, it is important to note that this study does begin to explore an area that warrants the attention of nurse educators and researchers. The practices of program evaluation in baccalaureate nursing education have been described to a greater extent than previously, limitations not withstanding. A model has been proposed in the interest of facilitating systematic comprehensive program evaluation in baccalaureate schools of nursing, and a design for program evaluation has been structured for a specific program in order to operationalize the proposed model and demonstrate practical application.

The empirical findings of this particular study have been identified and discussed earlier. The accidental discoveries and personal insights, which oftentimes lack a sound empirical foundation, are nevertheless a valuable product from any research endeavor in that they challenge and stimulate the researcher to examine personal values, assumptions and practices. These discoveries and insights, therefore, have the potential to stimulate further investigation as well as further personal and professional growth on the part of the researcher, and for these reasons merit consideration as any research endeavor is finalized.
This researcher has both investigated and taught theory development at the graduate level, but the insights gained from this initial attempt to develop a structure are worthy of mention. Similar to theory development, model development is based upon both scientific and personal assumptions, personal beliefs and values and the creative process of synthesis. The rigor and isolationist components of this developmental process cannot be overemphasized. Being relatively comfortable with the demands and exact expectations of the scientific research process, which attempts to limit subjective decisions and influences, this researcher experienced almost cognitive dissonance as the subjective nature of model development became more and more apparent. The wish to validate, to collaborate, to quantify and to justify each subjective decision was always present, and yet it was acknowledged throughout that this type of personal frustration is to be expected whenever one attempts structure development. It is interesting to note that knowledge of the frustrations inherent in structure development did not appear to decrease the frustrations experienced during the process.

Another unexpected finding worthy of mention here concerns the accreditation process of program evaluation. The belief that the accreditation process is a condition, process or activity rather than a model of program
evaluation has been addressed in the body of this work. What has not been addressed is the bias that initially existed here in the form of the pro-accreditation stance of the researcher. Experienced in the preparation of self-study reports and having served as a member as well as chairman of accreditation teams, the researcher has a long and positive history with the accreditation process. A frequent defender of accreditation, specifically specialized accreditation, the researcher perceived the development of the plan for program evaluation in this study to be an exciting opportunity to counter frequent criticisms of accreditation. A portion of the resultant plan addressed the processing and reporting of evaluation findings. This would make it possible to document the objectivity and empirical basis present within the accreditation process. The citing of the NLN criteria being addressed throughout the plan would address the frequent concern regarding the use of extrinsic versus intrinsic criteria when evaluating for purposes of accreditation. Approaching the development of the plan with this subjective viewpoint and hidden agendas proved to be not only counterproductive but also very time consuming. Attempting to use the plan in this manner not only violated the intent of designing the plan after the proposed model,
it became increasingly apparent that the foregone conclusions on the part of the researcher could not be demonstrated. On the contrary, despite various approaches by the researcher, each limitation of the accreditation process was verified rather than disputed.

As the researcher completed this work, and was reflecting on the process that evolved, it became increasingly apparent that the process just completed was, interestingly enough, a demonstration of the proposed model. The planning system, entered at the beginning of this work with a needs assessment deductively produced from the literature, was entered repeatedly until a resultant plan addressed identified needs. The implementation system was addressed and initially the result was to re-enter the planning system following the descriptive study. Once the needs of the sampled schools were included in the plan, implementation proceeded rather smoothly and the process was evaluated by comparing the proposed model with several factors identified as necessary for a viable model. The product is evident with the development of the plan, an attempt to operationalize the model for a specific program. Product evaluation, therefore, occurred when the researcher was reflecting upon the overall outcome as it related to the overall goals of the work.
The personal reflection addressed earlier also addressed the imperfections and accomplishments of this work.

If it were possible to repeat this descriptive study, the researcher would enlarge the sample, pre-test the request for program evaluation materials and consider the merits of including non-accredited schools of nursing. Obtaining face and content validity of the model, using experts in program evaluation as well as nurse educators who would use such a model, would have added credibility to the product, and using faculty input to plan program evaluation for the specific program cited may have increased the practicality and relevance of the resultant plan.

As one reflects on such a singular and creative process, it is difficult to see the accomplishments after identifying the imperfections. Specific findings have been discussed elsewhere. The impact, if any, this work will have on program evaluation for schools of nursing remains to be seen. A model is only useful if it assists those who implement the process in the conceptualization and resultant planning. A specific plan, based upon any one model, is only useful if it assists with the implementation of the process in question. This work was attempted with the goal of presenting program evaluation to nurse
educators so as to address their current needs and make the entire process more meaningful and practical. The accomplishments of this work can be identified only after observing the response of nurse educators.

Implications for Further Study

Initially, the proposed model and plan warrant actual testing in order to refine and structure them according to their actual usefulness to nursing faculty. Many questions about both model and plan can be addressed through actual use: Are they clear? Are they complete? Are they consistent? Are they effective? Are they efficient?

In addition, the many assumptions made throughout this work are acknowledged. Future writers and researchers are encouraged to quarrel with these assumptions, as well as encouraged to test their accuracy.

If the work here proves to be useful to nurse educators, it would be interesting and worthwhile to determine the needs of educators of other disciplines, specifically those who deal with the expectations of an accrediting body, and identify any congruence between those needs and the needs identified here. If congruence were
found to be high, the use of the proposed model for these disciplines would be worthy of investigation.

Program evaluation, in general has been studied very little from an empirical standpoint. A thorough and rigorous descriptive study is in order, regardless of the response to this work. Such a study could sample colleges and universities of a pre-determined size, and study the use of program evaluation within the various academic units. In this way it would be possible not only to describe prevailing practices in program evaluation, but also to compare those units who address the criteria of specialized accrediting bodies with those who need only be concerned with the criteria of the regional accrediting body.

It will be necessary to describe and define current practices in program evaluation in order to know where we are, so that eventually we may know what needs to be done to reach our goal of systematic and comprehensive program evaluation throughout education.
REFERENCES


Huffman, J. (1982). The role of accreditation in preserving educational integrity. Educational Record, 63(3), 41-44.


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The constant support and encouragement of my children, my parents and my sister also deserve acknowledgement. It appears I am the only one in my family who ever doubted I would eventually achieve this goal.

I specifically wish to express my gratitude and admiration for my advisor and major professor, Dr. Anton J. Netusil. His guidance, expectations, example and patience were motivating and supportive influences throughout my entire program of study. I believe Dr. Netusil served in the role of mentor, in the true sense, and this unique contribution to my education has been most appreciated.
APPENDIX A. CRITERIA FOR THE EVALUATION OF BACCALAUREATE AND HIGHER DEGREE PROGRAMS IN NURSING
I. Structure and Governance

1. The program's philosophy and goals are consistent with the mission(s) of the parent institution.

2. Faculty, administrators and students participate in the governance of the parent institution in accordance with the bylaws of the parent institution.

3. The organizational structure of the nursing program promotes effective functioning and fosters the attainment of program goals.

4. The program is administered by a nurse educator who holds a minimum of a baccalaureate in nursing and an earned doctoral degree and has experience in baccalaureate and/or higher degree programs in nursing.

5. The administrator of the nursing programs, with institutional consultation and nursing faculty input, has the responsibility and authority for planning and allocating program resources.

II. Material Resources

6. The fiscal resources are adequate to support the nursing program in accomplishing its goals.
7. The resources allocated to the program are commensurate with the resources of the parent institution.

8. The physical facilities are adequate for the program to accomplish its goals.

9. A comprehensive and current library, developed with input from nursing faculty, is available.

10. The clinical facilities provide opportunities for a variety of learning experiences that promote attainment of the objectives of the curriculum and goals of the program.

III. Policies

11. Faculty and student policies are written, implemented, and made available to those affected.

12. Policies related to governance and the conduct of the program are developed.

13. Policies of the nursing program are non-discriminatory and are consistent with those of the parent institution; policies which differ from those of the parent institution are justified by program goals.

14. Policies concerning admission, progression, retention, dismissal, and graduation reflect the goals of the nursing program and the objectives of the curriculum.
IV. Faculty

15. The size, academic and experiential qualifications, and diversity of backgrounds of the faculty are appropriate to meet program goals.

16. Faculty members hold as a minimum qualification a master's degree appropriate to their areas of responsibility.

17. A majority of faculty members teaching graduate courses hold earned doctorates.

18. Faculty members have and maintain expertise in their areas of teaching responsibility.

19. There is expertise within the faculty in curriculum development and evaluation, instructional design, and research.

20. Faculty endeavors include participation in scholarly and professional activities, and community service consistent with the mission(s) of the parent institution and the goals of the program.

V. Curriculum

21. The curriculum is logically organized and internally consistent.

22. The majority of learning experiences in nursing theory and practice are at the upper division level.
23. The curriculum content focuses on the discipline of nursing and is supported by other sciences as well as the arts and humanities.

24. The curriculum provides learning experiences in health promotion and maintenance, illness care, and rehabilitation for clients from diverse and multicultural populations throughout the life cycle.

APPENDIX B. INITIAL INVITATION TO SAMPLED SCHOOLS
Dear Dean or Nursing Program Director:

Drake University has recently initiated a Nursing Department offering both a BSN and an MSN. We are interested in developing a systematic evaluation plan and would appreciate it if you would send us a copy of the plan used in your program along with any supportive material you may have regarding the evaluation model used or developed by your faculty.

We are sending this request to a random sample of 75 programs throughout the United States, and plan to develop an evaluation model that is representative of any needs expressed as well as recommendations from the current literature.

If you would like a copy of the results of this study, please indicate below and return this form with the requested material.

Thank you for your consideration.

Sincerely,

Linda H. Brady
Chairman, Department of Nursing

LHB/dlh

I would appreciate receiving the results of this study.

Name__________________________

Title__________________________

Institution_______________________

Address________________________

_______________________________
APPENDIX C. FOLLOW-UP INVITATION TO SAMPLED SCHOOLS
Dear Dean or Director:

Last month we wrote to you asking for a copy of your systematic program evaluation plan, along with any supporting material you may have regarding the evaluation model used or developed by your faculty.

We are attempting to develop a systematic plan for our new programs, and plan to develop an evaluation model based upon an aggregate of perceived needs as well as recommendations from the current literature as a first step in our development process.

I would really appreciate it if you would assist us in this matter. A self-addressed, stamped envelope is enclosed for your convenience.

If you would like a copy of this study, simply enclose the attached form with your evaluation plan and model.

Thank you for your consideration.

Sincerely,

Linda H. Brady
Chairman, Department of Nursing

Enclosure

LHB/dlh

I would appreciate receiving the results of this study.

Name_________________________________________

Title_________________________________________

Institution_____________________________________

Address________________________________________

_________________________________________

_________________________________________
APPENDIX D. INSTRUMENT USED FOR TELEPHONE SURVEY
My name is Linda Brady, and I am from Drake University in Des Moines, Iowa. Last month I wrote to you asking for your plan of program evaluation as well as any supportive materials you may have regarding the model of program evaluation used or developed by your faculty.

Because I did not receive a very large response, I am calling a few of the non-respondents in hopes of collecting some additional data for this study.

Would you mind telling me why you did not respond to the two requests for information about your plan of program evaluation?

Do you currently have a plan of program evaluation for use in your program?

(If yes) Is your plan of program evaluation based upon a model of program evaluation used or developed by your faculty?
Please describe for me the areas addressed in your plan of program evaluation; what are the components of your plan:

__________________________________________________________________________

__________________________________________________________________________

How is the plan organized?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Thank you very much for your time. Would you like to receive results of this study? Data will be reported in aggregate form only, and I intend to develop a model of program evaluation based upon the needs identified in this study as well as recommendations from the current literature. I would be glad to send you the results if you would like.  

_____yes  _____no

IF YES...NAME______________________________

INSTITUTION______________________________

ADDRESS_________________________________

__________________________________________________________________________