A PROCESS OF CURRICULUM ANALYSIS

JOAN CROOK* Associate Professor, School of Nursing McMaster University

The changing needs of society for nursing personnel, an enlarging student body, and the establishment of a medical school at McMaster University led the faculty of the School of Nursing to critically review the curriculum design of the undergraduate nursing programme. While major changes were initiated in 1971, the process of curriculum analysis and change continues today. From the time that the process of curriculum change began, the structure within which the programme operates has become more complex. Changes have occurred in the university's administrative organization; a Faculty of Health Sciences has been established which encompasses both medicine and nursing; two new educational programmes have been established, in which nurse faculty members have major roles: and there have been a number of changes in the faculty complement that has the major responsibility for the B.Sc.N. programme. This changing group of faculty has continued to meet the challenge. The reader can appreciate the spirit of the programme if he/she accepts modification and change as the only constant; a standard of excellence as the major goal.

There were four major areas that required an organizational structure to support a dynamic, changing curriculum. Task Groups composed of nursing faculty, other health science faculty, students, clinical service personnel, and research associates were established to perform the following functions:

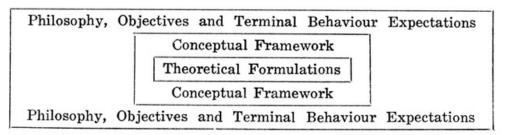
- 1) Curriculum monitoring Programme Task Group
- 2) Resource allocation Resources Task Group
- 3) Long-term planning Goals Task Group
- 4) Monitoring of standards Evaluation Task Group

These task groups report to the policy-making body of the programme, the Undergraduate Nursing Education Committee. Recommendations and educational issues or concerns are then carried to the Health Science Education Committee.

One of the assumptions has been, and continues to be, that a well-designed curriculum is necessary if students are to develop the

^{*}The author was assisted in the writing of the paper by members of the Goals Task Group and Operations Group.

Figure 1: Model From National League for Nursing



variety of professional skills required for creative nursing practice. It has fallen to the Goals Task Group to analyse the conceptual framework that gives structure to the curriculum and reflects the educational goals. The National League for Nursing model in Figure 1 has provided a framework within which to critique and analyse the curriculum(1).

PHILOSOPHY

The philosophy of the undergraduate programme and statements on the goals and purposes of the university and the Faculty of Health Sciences were examined to extrapolate congruent and conflicting beliefs. This examination was used to promote dialogue amongst faculty and also provided the impetus to the Health Sciences Education Committee to work toward developing a more formal statement of a philosophy for Health Sciences that would reflect the interface relationships among health sciences educational programmes.

Issues from the critical analysis of the stated philosophy included:

- 1. Should we be providing students with more educational, service and research opportunities that promote the development of collaborative relationships with other professionals? It is obvious that an individual programme cannot meet this goal in isolation.
- 2. Does the philosophy articulate an active response to the new directions of health care delivery suggested by recently published government reports, such as the Boudreau (2), Mustard (3), and Lalonde (4) Reports? The implications of these reports regarding regionalization, environment, human biology, life style, primary care, and expanded role skills should be reflected in a curriculum designed to prepare nurses to function in a changing society.

TERMINAL OBJECTIVES

A programme needs a clear view of an end product or goal. An analysis of the ten terminal objectives of our programme was undertaken to determine whether they reflect the desired characteristics

of a B.Sc.N. graduate. In summary, it was agreed that the programme aims to graduate a nurse who

- recognizes that learning is a life-long process for which the individual has primary responsibility;
- consistently uses a problem-solving process when faced with professional nursing problems, i.e. has an analytical "research mindedness" rather than a prescriptive approach to patient problems; and
- possesses human relationships and technical skills necessary to practice effectively and competently (5).

Examination of the stated programme objectives raised the following questions:

- 1. How are these objectives operationalized within the curriculum?
- 2. Are they congruent with our present beliefs and practice?
- 3. Do they reflect the present and future needs of the health care system?

CONCEPTS AND THEORIES

The faculty made certain assumptions when examining the conceptual framework of the curriculum:

- 1. Integration occurs within the mind of each student. A curriculum can help the process through the selection and organization of concepts, theories, content, courses, and learning experiences.
- 2. Nursing has a unique body of knowledge and function, but this body of knowledge is interdependent with, enhanced and influenced by other resources. We, therefore, take an eclectic approach to the use of theoretical formulations to explain and predict human behaviour and nursing practice. These formulations derive from the arts, biological, behavioural and nursing sciences.
- 3. Faculty function to facilitate students' independent learning through encouraging open-ended exploratory use of knowledge and skills, and exposing students to real and simulated situations in which the knowledge and skills can be used. Problem-based learning is fostered.
- 4. An identification and understanding of the issues that are presently facing us as nurses and educators is a necessary prerequisite for directing actions toward constructive solutions. This implies exploring our "sacred cows", questioning previously unquestioned assumptions.
- 5. It is important to re-examine the often ambiguous meanings and applications which are given to such terms as nursing process, concepts and theories.

giba.

Figure 2

Major concepts	Subconcepts	Theoretical Formulations
Health	Health-illness continuum Health maintenance Health promotion	Systems theory Adaptation theory Stress theory
Nursing	Nurse-patient relationship Health team Nursing team leadership	Communication theory Nurse patient relationship theory Role theory
Man	Bio-psycho-social- sexual being Growth and development	Systems theory Need theory Developmental theory
Society	Family Community Nation	Health Care delivery system Epidemiological theory
Teaching- Learning	Self-directed learning Self-evaluation Change	Change theory Group theory Problem-solving methodology

Using the model for curriculum analysis, the Goals Task Group compiled the major concepts over the four years. The sub-concepts compiled were numerous, as were the theoretical formulations. A sample of the application of the model is tabulated in Figure 2.

The group had difficulty identifying and extrapolating the development of the sub-concepts vertically in any one year and horizontally throughout the four years. The reasons for this difficulty are most likely obvious to anyone in education. For example, while a curriculum has both a structure and process, it is not a static entity. New faculty bring new ideas and interpretations to a curriculum design and internal and external influences and pressures require response and plans for modification.

The effort, nevertheless, raised several issues that faculty and students must appraise:

- Semantic ambiguities regarding the terms faculty use;
- The anxiety and confusion for both faculty and students regarding the different theoretical approaches used in the identification and solution of nursing problems; and
- The level of competency in ambulatory and expanded role skills expected of graduates.

Faculty now face the issue of attempting to strike a balance between the ambulatory and expanded role skills and the acute "critical care" skills necessary for competent practice in the variety of settings in which graduates function. While the Goals Task Group has been giving direction to faculty and students in the examination of the curriculum, other faculty/student groups and individuals have been focusing on other issues and tasks, including:

- Preparing a follow-up study of graduates and their employers to evaluate the effectiveness of the programme and to assess its relevance to community and professional needs;
- Exploring ways of providing more opportunity for students to enroll part-time or achieve advanced standing;
- Looking towards developing a general admission policy for all Health Science programmes;
- Joining with a number of science and medical departments in an examination of the basic science component of the curriculum;
- Participating in the development and administration of a series of workshops for the Faculty of Health Sciences on teaching methods and orientation;
- Completing a comparative study of the effectiveness of different teaching methods; and
- Working with the Faculty in the School of Medicine on the expansion of interprofessional learning opportunities.

Other tasks will be generated within the programme as new needs are perceived, and in response to changes within the health care system. Others will occur because of the position of the School within the Faculty of Health Sciences. It is acknowledged that changes should be preceded by a rigorous, intellectual re-evaluation of where we are and where we have been.

References

- 1. Gertrude Torres and Helen Yura, Today's Conceptual Framework: Its Relationship To The Curriculum Development Process. Pub. No 15-1529, National League for Nursing, New York, 1974, p.3. Had the draft of C.A.U.S.N. accreditation guidelines been available when the Group began its analysis in 1971, these would have been used.
- 2. Department of National Health and Welfare, Report of the Committee on Nurse Practitioners. (Chairman: Thomas J. Boudreau). Ottawa: April 1972.
- 3. Ontario Ministry of Health, Report of the Health Planning Task Force. (Chairman: J. F. Mustard). Toronto: January 1974.
- 4. Mark Lalonde. A New Perspective on the Health of Canadians, A Working Document. Ottawa: Department of National Health and Welfare, April 1974.
- 5. Dorothy J. Kergin. "University Education for Nurses For What Purpose?" Paper presented at the Biennial Meeting of The National Florence Nightingale Committee of Australia, October 1975 (In press).