A University Professional School Uses Cooperative Curriculum Research

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The program described in this article represents a sustained application of the principles and techniques of cooperative curriculum research to the basic education of nurses. Other professional schools in a university may well watch the further development of this action research program.

The importance of cooperative curriculum research is increasingly being recognized in curriculum and supervisory work in public school systems. The contributions of ASCD to this process have been extensive. The question arises as to what use has or has not been made of curriculum "know-how" in improving the educational programs within university departments and professional schools. This article seeks to describe how one professional school in a university is attempting to apply present knowledge of curriculum planning to the improvement of its educational program.

A five-year curriculum research project in basic nursing education, supported by funds from the National Institutes of Health and Commonwealth Fund, is in its second year at the University of Washington School of Nursing. The research staff includes personnel from the fields of education and nursing, with the director from education.

Map of the Project

The various studies in the project seek to develop through cooperative action research a more effective instructional program to prepare professional nurses in a shorter time. The continuing unfulfilled demand for professional nurses makes imperative the critical study of nursing curriculums toward the end that the complex health needs of people in modern society be met more adequately. Leone speaks of these needs as follows:

I like to think of the health needs of people in three major categories. It is usually the doctors who design the ways in which needs are to be met, and doctors and nurses, as well as other health personnel, work together in meeting these needs. People need comfort when they are ill and until they are restored to optimum functioning. They need to know how to care for themselves and their families during minor illnesses, chronic illnesses and convalescence. They need to know how to keep well and to prevent illness and injury.1 These we might con-

1 Drawn from "A Design for Nursing," an unpublished paper by Mrs. Lucile Petry Leone, Chief Nurse Officer, United States Public Health Service, who is serving as nursing consultant to the project.
sider as three major categories of health needs.

Four major questions\(^2\) guide the research:

1. What objectives should students in basic nursing education seek to attain?
2. What are the best possible learning experiences which will help students most efficiently attain these objectives?
3. How can these learning experiences be most effectively organized?
4. What kinds of evaluation procedures can be developed to determine whether the students areattaining the objectives?

The problems under attack are of concern to the total faculty. A number of specific problems have been identified and hypotheses formulated. Data concerning each study are being collected and recorded through such means as observations, group and individual interviews, questionnaires, minutes of faculty meetings, paper-and-pencil tests, and the like. These materials are being analyzed and interpreted as they contribute to answering the major questions guiding the research. As the research progresses, findings from various studies already are resulting in changed practice by the people concerned. It is hoped that major findings over the five years will result in some generalizations of significance to the nursing profession as well as to other professions.

\(^2\)Drawn from Ralph W. Tyler. *Basic Principles of Curriculum and Instruction*. Chicago: University of Chicago Press, 1950. Dr. Tyler, Director, Center for Advanced Study in the Behavioral Sciences, Ford Foundation, serves as curriculum consultant to the project.

The research staff perceives its primary role as that of helping the faculty ask pertinent questions, clarify them and explore promising ways of answering them. Another function is that of compiling for a busy faculty the results of data-gathering. Serving as a resource to faculty and student committees, to work conferences, the in-service program, and individuals is a third task of the research staff.

**The Setting**

The School of Nursing uses three major hospitals to provide clinical experiences for students in the basic program. The major portion of the research is being carried out in one of these hospitals; the other hospital clinical units, however, are also involved in testing certain hypotheses. From its inception, the research project was discussed at faculty meetings which included representatives from the campus and all hospital clinical units.

The faculty has been engaged in curriculum study and improvement over a period of years. Responsibility for curriculum planning has evolved from a relatively small committee’s work to widespread faculty participation. Many difficulties were involved in terms of time, divergence of interest, and organization of the faculty for group work.

The extension of faculty participation the past few years grew out of

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a workshop in which clinical faculty members shared in a panel discussion on "The Contributions of the Clinical Specialist to the Over-all Objectives of the School." One participant, commenting on what she had gained from the panel, suggested that a way be found whereby the entire faculty working together could study the curriculum. A series of one- and two-day curriculum conferences, extending over a period of two years, resulted. Attention during the first year centered upon the over-all aims of the basic curriculum and upon exploring a variety of ways of working together on curriculum problems. There were many "growing-together" difficulties as the faculty attempted to reach common understandings of program goals. Certain fundamental beliefs evolved during this period into a guiding statement of philosophy.

In 1950, the United States Public Health Service had assisted in conducting a survey of nursing needs and resources in the State of Washington. Following this, a survey directed toward the improvement of nursing in the State of Washington recommended that the University of Washington School of Nursing take leadership in strengthening diploma programs in the state and in developing a research program. Growing out of these two surveys and the problems the faculty members were facing as they worked on the curriculum, the research project described in this article was initiated.

Developments in the Five-Year Research Project

In attempting to achieve the first purpose of the research project concerning objectives, the following questions arose:

1. What should the students learn in their basic nursing education program?
2. What should be the role of the School of Nursing in helping students learn?
3. What can students reasonably accomplish in the limited time available?

A unique feature of the project which makes it significant for nursing education and for professional education generally is the thoughtful study carried on by the faculty and student body concerning these problems. A committee was formed to synthesize the large number of objectives developed by faculty and student representatives and to determine which objectives could serve as threads running through many areas. As a result of this synthesis, seven essential behaviors (ways of thinking, feeling and acting) were identified: (1) understanding of facts and principles, (2) critical thinking, (3) communication skills, (4) attitudes and appreciations, (5) interests, (6) habits and (7) psychomotor skills. The faculty recognizes that the eventual goal is integration of all of these behaviors within the student. However, it is believed that the definition of each category to the point where there will be common understanding will facilitate selection of meaningful and satisfying experiences. For example, everyone agrees that rote memory or parrot-like answers (the psittacotic method of teaching) is inadequate. In

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this project, understanding, as opposed to sheer memorization, has been defined as follows: (1) recalls facts and principles when needed, (2) states facts and principles in own words, (3) gives illustrations of facts and principles from own experiences, (4) compares and contrasts facts and principles, (5) uses facts and principles in solving problems. This appears to be a workable definition.

The faculty believes these behaviors are not unique to nursing, but that the uniqueness comes in the application to selected content areas. The content areas (areas of life) in which a nurse operates have been more difficult to define. Five have been tentatively accepted: (1) the nurse as a person and as a citizen, (2) the body of scientific knowledge, (3) the nurse working in a health agency with others, (4) the plan for individual nursing care and (5) the nurse's heritage from her profession.

A statement regarding the role of the School of Nursing in developing a good person and a good nurse has been formulated by the faculty and is proving useful as a screen for selecting objectives to make certain that all will be in harmony and as a guide in answering the question, "Should this be done?" A second screen for the selection of objectives is a theory of how learning takes place. A committee, with the assistance of the total faculty, has developed a statement concerning the point of view the faculty holds regarding learning. This is serving as a check on the feasibility of attaining the objectives and is proving helpful in answering the question, "Can this be done?" Certain objectives which are in harmony with the philosophy of the school may be difficult to accomplish upon further consideration of the learning process. The definition accepted is that learning is change in behavior which results from experience and which persists. Certain principles of learning have been stated and illustrations of the operation of these principles in nursing developed. These three ingredients of the map of the program—the objectives, the philosophy and the theory of learning have focused the energies of the faculty and students toward common ends.

This analysis of ends is providing a framework within which the various studies in the research project are being developed. These studies involve promising hunches for improvements within courses as well as for more effective organization of learning experiences and evaluation. The validity of these hunches will be determined by the extent to which each student attains the objectives of the basic nursing education program. This, in turn, implies follow-up studies of students after graduation.

Relating General and Professional Education: An Example

Space does not permit a description of all the studies under way. One area has been selected as an example. A major task facing the faculty and students has been that of finding better ways of relating general and professional education. A persistent question that arose was, "How can we find ways of tying practical and clinical experiences with the basic social and natural sciences and the humanities so that each illuminates the other?"
A profession, which involves complex tasks, requires the artistic application of principles and concepts rather than rule-of-thumb performance. This is one aspect of “understanding” and “critical thinking” identified as desired student behaviors. Students begin to learn many of these principles in liberal arts courses. Their artistic application to specific professional problems is one of the functions of the professional school. Recent statements by leaders in the professions of engineering, business administration, medicine, law and the like all point to the significance of this area of study.

Recognizing that much professional knowledge has its root in general education, five basic questions guide our attempts to solve the problem. We believe these questions require the attention of all professional schools in a university.

1. What are the major concepts that all university students should begin to learn in their general education courses?

2. Which of these basic concepts from general education should and can be broadened and deepened in professional nursing courses?

3. How can nursing students be helped to apply these concepts from general education that have implications for professional practice?

4. How can we evaluate to find out to what extent the nursing courses are helping students apply concepts from general education in solving nursing problems?

5. What kind of curriculum pattern will facilitate relationships between general and professional education?

Major concepts in the social and natural sciences and in the humanities have been identified by individual conferences with faculty members who teach those courses. Faculty members from these fields are meeting with the clinical nursing faculty to determine which of these concepts have professional implications. Two clinical research instructors with special preparation in the social sciences and the natural sciences are planning with the regular faculty nursing situations which will help students apply the basic concepts they started to learn in the social and natural sciences. These instructors are working with the students in analyzing nursing problems to identify major concepts essential in problem-solving. Discussions are held with the students to help them recall facts from, for example, sociology that relate to the solution of nursing problems. Additional discussions are held to help students draw broad generalizations from these facts and to focus on the question, “How can we use these facts and generalizations in solving a similar nursing problem?” Beginning steps on evaluation of application of principles involve conferences with students, observation and paper-and-pencil tests. The development of a test on “Application of Social and Natural Science Principles to Nursing” is in progress.

In the research program general education is being spread over a longer period and nursing experiences run throughout the entire program. This differs from the conventional pattern in nursing education, which consists of a block of general education followed by professional courses. For
example, three two-hour courses in human growth and development are being offered over a period of three years in place of one five-hour course in psychology in one quarter. A seminar on “Scientific Principles in Nursing Care” will be offered in the senior year which will stress the use of social and natural science principles in the solution of nursing care problems.

Efforts toward more effective weaving of general and professional education are guiding the new curriculum pattern. For example, students have had a course in “Introduction to Art” in their first quarter on campus. The art instructor has some promising hunches on the basis of student performance in his course concerning those students who will relate very well to patients and those who will probably need special help. The major contribution of the course has been in the release from tension, the opening of a new avenue of communication and the development of a different kind of perception. Interesting developments concerning ways in which the clinical nursing faculty can broaden and deepen these aesthetics in nursing are under way.

Other changes in the curriculum pattern involve ways of weaving mental health and public health concepts through all nursing courses, and the integration of medical and surgical nursing, operating room and diet therapy. The research project also is attempting to demonstrate that hours of formal class work in the natural sciences can be reduced if the clinical faculty can broaden and deepen important principles throughout clinical practice.

How the Faculty Is Working

From the initiation of the curriculum research project, the faculty has been seeking more effective ways of working together. It has been difficult to analyze the factors involved in securing and sustaining faculty commitment to the project. Interest and the desire to participate were apparent when the project was first proposed. It appears, therefore, that the project evolved from a pre-existing need within the faculty group. Administrative support, enthusiasm and recognition for the work being carried on have been apparent throughout. Periodically, the faculty has evaluated the effectiveness of the various study processes. Records of these evaluations have been analyzed and utilized by the faculty members in improving their ways of working together. Opportunity to express ideas and opinions and consideration of the contributions of the individual have been factors in maintaining interest. Despite the constant addition of new members to the group, the process of working together has tended to produce a group spirit and cohesiveness that have been sustaining. The way in which the faculty organized for curriculum study has been part of an evolving process and therefore has not become fixed. Small and large committees, all day conferences and individual work all have been utilized. Leadership functions have been shared by many faculty members.

The process of resolving differences of opinion and arriving at group decisions has involved primarily securing a free expression of ideas and opinions.
in group meetings, striving for consensus rather than majority opinion, and allowing ample time for discussion. In some instances, time was not adequate for discussion and expression of ideas or problems. In these instances, agreement was not reached and decisions had to be reconsidered at a future date or anticipated outcomes of action would not materialize.

Certain problems have arisen in the process of the group work. A few of these are reported here. As the curriculum work has extended to cover an increasing number of areas, some difficulties in communication and maintenance of group consensus have developed. New faculty members have experienced some difficulties in becoming oriented to curriculum work. Faculty members who are spending a great many hours in various aspects of curriculum work are at times experiencing pressure and frustration due to other demands of their jobs.

One important means of motivation for the faculty has been four major work conferences that have been held with well-known consultants from the fields of nursing and education.

The cooperative curriculum research project in basic nursing education described in this report pinpoints the contributions that curriculum workers can make to other professional schools in a university. Conversely, other professions have contributions to bring to the curriculum worker. Does ASCD have other clienteles on university campuses whom it might serve?

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**Cooperative Self-Evaluation Can Aid Curriculum Development**

ARTHUR J. LEWIS

Beginning with cooperative self-evaluation, school faculties in one city are finding ways to clarify their objectives and to improve their services to children.

TEACHERS generally are eager to improve the quality of instruction in their classrooms (a) when they see the need for such improvement, (b) when they are given freedom to try their own ideas and (c) when they are given the assistance they want. The study described below is an attempt to provide these conditions, particularly the first, because programs of instructional improvement often fail when such conditions are lacking.

The Elementary School Planning Committee of the Minneapolis Public Schools, composed of one elected representative from each elementary school, has been conducting a study of the school day. The first part of this study determined the amount of time devoted to various phases of the school curriculum. At the conclusion of this quantitative analysis the planning committee recommended a qualitative study to determine the effectiveness of