ONE difficulty encountered by nurses is that of developing a theoretical framework upon which nursing can be based. A concomitant problem is operationalizing the theoretical model. This paper describes how one college programme dealt with the problem. As explained by Schumacher the programme assumed a core of nursing applicable to all clinical areas. The goal was to recognize relationships among general concepts of the phenomenal field, specific concepts within a phenomenal field, and the symptoms of illness(1). How could learning experiences be provided that would result in concept learning and recognition of relationships among concepts? Bruner states:

To learn structure, in short is to learn how things are related. Grasping the structure of a subject is understanding it in a way that permits many other things to be related to it meaningfully(2).

The Webster dictionary defines structure as the arrangement of parts or elements; it defines concept as a mental image or impression of an object, person or event, an abstract notion (3). If the learner was provided with experiences representing a variety of parts (structure) of an abstract notion (concept), then relationships should be recognized among general concepts of the phenomenal field and specific concepts within that field. This became the rationale for the organization of nursing courses.

PROGRAM DEVELOPMENT

Three of the learning principles basic to teaching in the programme were that learning takes place within the environment of a relationship, learning is discovery, and learning is more useful when generalized into principles or concepts(4).

Teaching methods and course content were organized with the foregoing principles in mind. The environment of one relationship to be fostered was a climate of trust between learner and teacher.
Toward this end Maslow’s belief that the teacher should be a pleasant collaborator, with natural simplicity replacing authority, became the model(5). Interaction among learners and teachers was encouraged on an informal footing. Little of the course content was presented by lecture; small-group work with the teachers as resource persons became the method of choice.

Techniques designed to develop the total learning-teaching environment into one conducive to learning were practiced. For example, there was seldom opportunity to reflect upon the subject matter before a class commenced, in a setting where learners must move from class to class at allotted times. To overcome this problem the first five or ten minutes of a session were frequently spent in listening to music or just sitting quietly. Another question regarding environment related to what kind of learning was to occur? The aim was to stimulate learners toward independent thought. What kinds of questions were being asked? In order to guide learners in the direction of convergent thinking the technique of probe questioning was used. An example of this method is described by Griffin in the use of “what if” questions(6).

Experiential learning was a focus of the programme. The importance of an experiential continuum is explained by Dewey,

Only by extracting, at each present time, the full meaning of an experience are we prepared for doing the same thing in the future(7).

The mode of expression used by students to test out their ideas about a concept took many forms. Since some individuals can express themselves more readily in one medium than another, learners were encouraged to use music, poetry, sequencing of pictures or story telling, in order to grasp the concept under study.

The principle that learning is discovery was projected through the provision of discovery-skill-laboratories. Small groups of learners explored equipment, used audio-visual aids, as well as reference books, and discussed their findings with peers and teachers. The students were free to plan and proceed with their activities as they wished. The requirements were that each team would identify the underlying principles, collect the necessary equipment, and demonstrate nursing intervention related to the concept under study.

The third principle was that learning is more useful when generalized into principles or concepts. Learning experiences were arranged on the basis of Kagan’s belief that, concepts are developed by means of building a mental image from exposure to a variety of different dimensions of the object, person, or event to be conceptualized(8). To
achieve this goal a series of classes was organized around the concept under study. The first class would deal with theory in relation to the concept, from within the framework of a real-life situation. The second class focused on a case study which reflected the concept in relation to factors which influence the individual, such as age, culture, social status, and position on the health-illness continuum. Drug use and administration was also included in this class. The third session took the form of a discovery-skill-laboratory as previously described.

The social climate during classes was one of learner dominance. The students worked in teams of two or three members, often becoming so absorbed in their activities that the team of teachers was forgotten, until required as resource persons. Groups of learners frequently worked on different facets of the concept under study, than did their peers. Courage to play music during classes, to permit learners freedom of activities, and in general to attempt a different way of teaching was, in part, gained from a stimulating workshop(9). Perhaps one of the most difficult lessons is to learn to give up some of the content and methods adhered to so strongly in nursing.

A MODEL FOR STUDYING A CONCEPT

The model used to study each concept is exemplified as follows(10):

The concept of pain: Pain is one of the common life experiences of many which gives rise to physiological and emotional responses.

Pain:

— cause — organic — disease — pathology

— functional

— inflammatory process

— character

— anatomical and physiological pathways

— response to pain — age

— culture

— severity

— how is pain perceived and experienced

— consequences of pain — birth — love — joy

— distortion of body image — adaptation

— death — grief

— effects of pain — anorexia, nausea, vomiting

— physiological

— psychological

— the meaning of pain

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How to evaluate the learning outcomes was influenced by the work of Hullfish and Smith, which suggests a concept has been developed if the learner is able to explain or use the concept in a setting other than that in which the learning occurred(11). The clinical laboratory provided a setting which would reflect the student’s grasp of a concept. Observations were made by teachers to identify the extent to which elements of the above model were applied in the learner’s implementation of the nursing process. The following is an example of concept learning as reflected in health care provided by a team of two nursing students, in the second term of the first year of a two year programme.

EVALUATION OF CONCEPT LEARNING

Data for this section were gathered through observation of and discussion with the nursing student team, as well as study of their nursing care plan, as they explored the nursing process. The concept under study during the clinical laboratory experience was the concept of pain. The situation involved a muscular young man who had recently undergone an open reduction and application of a cast, for a fracture of his right elbow.

In assessing the situation the learners discovered that the patient experienced pain upon the slightest movement of his damaged arm. He responded to pain with facial grimaces, pallor, perspiration and verbal expression of discomfort. They also discovered the patient felt something besides the physical pain. Immobilization due to the heavy cast, on the arm he normally used most, resulted in a feeling of frustration. The weight was more than his injured arm could tolerate but it was almost impossible to keep the limb free from movement during even the mildest activity of daily living. Furthermore, observation revealed profuse perspiration followed administration of the prescribed analgesic, leaving the patient uncomfortable and in a state he described with disgust as “weak”.

The students also noticed tattoos of varying depth of colour on both arms. The patient stated he was having “the dumb things removed”. Verbalization about night courses to “make something of myself — do you think that’s possible?”, about a marriage ending in separation, and about “that crazy fool motor bike” led to a change of the students’ plan of action. They decided to focus on the patient’s need for self esteem and a strengthened self image, as well as on the pain he was experiencing.

Their plan was to find ways of immobilizing the arm more securely during ambulation in order to reduce pain upon movement and alleviate the fear of pain. They wanted to increase his independence
and to consult with other members of the health team about the side
effects of the analgesic. Conversations vacillating between bravado
and serious plans for the future, resulted in the nursing students’
decision that the patient was trying to change his style of life and re-
thinking his personal values. The high priority needs were identified
by the learners to be need for pain reduction, for mobilization and for
a strengthened self image.

Implementation of their plan included a change of analgesic, sup-
port of the injured arm in a sling hung from an intravenous pole,
placing of a chair before the bathroom sink to make personal hygiene
possible with privacy and independence. To help him meet his need
regarding self image the students decided to take their cues from the
patient’s behaviour suggestive of his “wants”. They offered them-
selves as interested listeners whenever he indicated a wish to share
his ideas and plans, with the goal of being as honest and supportive
as possible.

In evaluating the effectiveness of their nursing the student team
believed that this young man had been helped to meet his needs re-
arding pain, mobility and self image. This decision was reached
through observation, discussion with the patient and health team
members, and notations in the medical record of the patient’s be-
aviour.

**THE SETTING**

Clinical laboratory experiences were selected in relation to the
concept under study; in this example the setting was a hospital. A
multiple student assignment method was employed incorporating the
roles of participant, information gatherer and observer. Value of
each role in the learning process has been described by Schu-
macher(12); in the above example observer and information gatherer
roles were taken by one learner and the other student assumed the par-
ticipant role.

Four or five teams of two or three nursing students contributed to
nursing care of the elderly, children, adults with medical or surgical
health problems and women with new born infants. The purpose of
the laboratory experiences was to develop specific concepts further.

This kind of selective learning experience requires a colleague
relationship among nurses in the clinical setting, students and teach-
ers. Contributing to nursing care, while focusing on the particular
concept under study, seemed to assist in establishing the nursing
student role as that of a learner. It also seemed to strengthen the
graduate nurse participation with the student in the learning process,
and fostered acceptance of a different kind of nursing programme. Learners were accepted by members of the health team in complex situations of recovery, labour and delivery rooms, admission, post surgical units and other critical situations. Following clinical laboratory experiences the students met in conference to discuss similarities and differences observed about the concept being studied. The conference groups were small and included members from each area in which the students had been working, the purpose was to foster the belief that there exists a core of nursing applicable to any setting.

SUMMARY

This paper described how a two year college nursing programme dealt with the problem of teaching concepts. The goal was to provide learning experiences that would identify the structure or parts of concepts under study, in order to learn the wholeness of and relationships among concepts. Structure was presented by means of a series of classes representing a variety of dimensions of the concept. The series included theory about the concept, factors influencing the individual, and nursing intervention. To create a climate conducive to learning, efforts were made to encourage independent thought and a relationship of trust between learners and teachers. Evaluation of learning outcomes was based on use of the concepts away from the original situation. The clinical laboratory provided a setting which could reflect concept learning in nursing action. An example of care provided for a particular person was included.

References
3. Webster Dictionary