

LEARNING TO OBSERVE

MARGARET ROSS

Assistant Professor, School of Nursing
McGill University

"Nursing is a process that is theoretically grounded in practice. That is, nursing knowledge is generated from experience with patients" (Hooton, 1975). Given this philosophy of nursing, the learning of nursing must have as its focus the student and her experiences with patients. An exploration and analysis of these experiences will reveal the content of nursing for the learner. Although the type of experience provided is important, it is particularly crucial for the teacher to attend to how the student learns. "Knowledge is a process, not a product" (Bruner, 1960). "The emphasis is on the way the student learns rather than on the nursing skills she acquires" (Riley, 1972). The patient is the prime source of data for this approach to nursing and for the learning of nursing. The plan of care evolves from the data gathered in the patient situation and the effectiveness of this plan is measured in terms of the patient's response.

Observation is a primary skill in nursing and is an important and valuable method of study. The learner builds up a comprehensive health assessment after reconstruction of the patient and his/her situation based upon many sorts of observations and sometimes from a compilation of many small cues. With skill and purposeful effort applied to this process of observation, the student can learn to identify nursing outcomes that are more consistently valid and meaningful. Observation, always a part of the nursing process, needs to come under more conscious control of the learner. In order to learn to use the patient as a prime source of data, the student must develop her observational skills.

This paper describes a program in learning observational skills. It was experienced by students during their first six weeks of study towards a baccalaureate degree in nursing. Concurrently, as observers, they were experiencing their first contacts with patients in the medical clinics of our teaching hospitals. The overall intent of the program was to introduce the students to the approach to learning just described. Learning experiences were planned in a sequence which would allow the students to move from the known to the unknown and from the simple to the complex. The focus was on the process of learning as opposed to the content or outcomes of learning.

Specific goals of the program were identified. In a successful program for learning observational skills, each student would:

1. participate actively in the process of learning.
2. be emotionally as well as intellectually involved in the learning experience.
3. add to her repertoire of skills, ones which would allow her to be a more astute observer.
4. gather more data of higher quality from an experience through observation.
5. give others more precise descriptions of what she had observed.
6. elicit from the data gathered, knowledge pertaining to the content of nursing.

The teaching methodology flowed from the overall intent and purpose of the program. It was based on the students' ability to attend to data. In light of this, it seemed important to control the variables to which the students were to attend. Six discrete experiences were selected to meet the goals of the program. The teacher took care in introducing these experiences to avoid providing preconceived solutions. Rather, she asked questions which sought further descriptions and clarification of data presented. She provoked the students to examine the process of their learning. In this way, the teacher attempted to assist the students to enlarge upon their observational skills and to use the data collected in the development of nursing knowledge.

THE PROGRAM:

The program consisted of the following series of classes:

1. Pre-test — Observation and Description of Video Tape Recording
2. Observation of Inanimate objects
3. Park Observation
4. Description of Observations
5. Film "The Eye of the Beholder"
6. Post-Test — Observation and Description of Video Tape Recording

Pre and Post-Test:

The intent of this exercise was to provide all the students with the same stimulus in order to obtain a baseline from which to assess change in their observations. The students were given an opportunity to observe a video tape recording and then to describe their observations in writing. The same tape was shown again at the end of the term. In making unstructured observations, the students had maximum freedom to record what they observed since the instrument used to collect the data was a blank piece of paper. These descriptions were then assessed for change.

It was important that the stimulus for the pre and post-test be the

same in order to meet the objectives of the exercise, that is, to look for change in the students' descriptions of what they had observed. In order for the students to deal with the task as efficiently as possible, the tape which was chosen as a stimulus needed to be simple and noncontroversial in nature, contain few variables to which to attend, be short in length so that fatigue was not a problem to the students, and contain no auditory or visual interferences so that it would be easy to look at and listen to. With these considerations in mind, a black and white video tape was selected; it was approximately ten minutes long and presented a young woman feeding an eighteen month old child. This stimulus met these criteria: it was simple in nature, contained few variables, and had a high probability of content familiarity to the students.

The students were given the following instructions. "Observe the videotape recording and following your observation record the data you have gathered from the tape in writing. You may have all the time you need to do so." A record of the time taken to complete the assignment was made: the time was noted when the students began to write and again when each student submitted her paper.

Class No. I: Observation of Inanimate Objects:

The focus of this class was to highlight the use of the five senses as observational tools for the process of gathering information or data. Specific objectives for the students included:

- 1) To discover the senses most predominantly and most infrequently used as data collectors.
- 2) To examine the type of data gathered by each of the senses.
- 3) To consider the relationship between the quantity and quality of data gathered and the completeness of the knowledge acquired about a situation experienced.

The stimulus for this experience demanded the use of the five senses for observation. Three inanimate objects were used: a colourful Russian doll, a rubber squiggly toy, and a danish pastry wrapped in saran wrap. These objects revealed data which pertained to color, size, shape, sound, taste, odor, temperature, and texture. The students were asked to observe the objects and describe to each other their observations without labelling the objects. This exercise lent itself to small groups (approximately 6-10 students) with the teacher eliciting descriptions of the objects from the students and recording them on the blackboard. Once the students had exhausted their repertoire of descriptions, the teacher then engaged the group in an analysis of the recorded descriptions.

In order to facilitate this analysis, the following questions were used as guides to discussion:

- 1) How did you observe?
- 2) What senses were used to observe?
 most frequently?
 least frequently?
 rarely or never?
- 3) What type of data was gathered by each of the senses?
- 4) How did your feelings about the objects influence your observation?
- 5) How did your response to the objects influence your observations?
- 6) How do the descriptions relate to the objects?

The descriptions elicited from the students revealed data which pertained to color, size, shape, sound, odor, temperature and texture. During the discussion, the students discovered that the senses of sight and touch were most frequently used to gather the data. One student stated that while she heard the crinkling sound of the saran wrap, she did not consider shaking the doll or rubber toy as she knew that she would hear nothing. In point of fact, the Russian doll was wooden and contained other dolls which she would have heard had she shaken them. Another student stated that she had considered unwrapping the pastry and tasting it however had not done so. Several students giggled and quickly passed the rubber toy on to a classmate indicating that the experience of handling the toy was unpleasant. One student stated that because she did not like the feel of the toy, she did not attend to it as deliberately as she did to the other objects. A few students described various functions that the objects might serve and a few judgmental statements such as "it is pretty", "it feels terrible", and "it smells good" were made. The students pointed out that descriptors such as terrible, good, ugly, etc. were not useful as they were non-specific, too general and open to a variety of interpretations.

Class No. II: Park Observation:

The intent of this exercise was to provide the students with an observational experience which increased the number of variables that the students needed to attend to while observing. Specific objectives for the students included:

- 1) To identify the variables which influence one's ability to observe.
- 2) To examine how each of these variables influence how and what one observes.
- 3) To examine how decisions about what one will focus on are made in a multi-variable situation.

The students were given the opportunity to spend one half hour observing in a public park of their own choosing. Following this

experience, they were asked to record their observations in writing and bring their description to class. The role of the teacher was to assist the students to analyse both the process of data gathering during the experience as well as the outcomes of the process, that is, the data gathered. The following questions were used to foster this analysis:

- 1) How did this experience differ from the in-class observational exercise?
- 2) What were the variables that contributed to this difference?
- 3) What feelings were conjured up while observing in the park?
- 4) How did these feelings influence your observing?
- 5) What type of observations were made during this experience?
- 6) How do the observations relate to the reality of the park?

The park observation proved to be a very different experience from the in-class exercise. Students recognized a tremendous increase in the number of variables that needed attention while observing in the park. Some chose to focus their observing on one part or aspect of the park. More attempted to provide a more general picture of the entire park. The students found they were observing people who were in turn observing them. A decision about whether or not to take notes needed to be made. Some felt that notetaking would interfere with the observation process yet were concerned about their ability to recall data. Others who took notes felt conspicuous doing so and suspected that one could miss data while recording.

Most of the students felt that their description did not do justice to the park. One stated that the park was more than the sum of the parts she had described. Another stated that although the ability to describe the physical layout and composition of the park was important, other elements such as the history of the park and demographic data about the users of the park would add to the comprehensiveness of their knowledge of the park.

Class No. III: Descriptions of Observations:

The focus of this class was to examine the use of language to describe and communicate observations to others. Specific objectives for the students included:

- 1) To examine the words and expressions used for specificity, objectivity and descriptiveness.
- 2) To discover the variety of meanings placed on the same word or expression by different persons.
- 3) To explore ways in which situations may be represented or misrepresented by the use of language.

This exercise also lent itself to the use of small groups (approximately 4-6 students). Group I described to group II a picture taken from a photograph album. Group II then attempted to picture in their minds the photograph just described to them after which they had an opportunity to actually inspect the photograph. Group II then compared the reality of the picture with their perceptions of the photograph which were based on the descriptions of group I. This exercise was repeated several times using different pictures. The students were asked to "observe the picture and describe your observations to your classmates." The role of the teacher was to assist the students to examine the outcomes of their use of language in the sharing of their observations with their classmates. The following questions were used to provoke discussion:

- 1) Based on this experience, how effective were you in representing the picture to your classmates?
- 2) What sorts of problems resulted from your descriptions?
- 3) What sorts of variables influence the use of and meaning attached to words and phrases?
- 4) How can one determine that the meaning intended by the use of a word or phrase is the meaning received?

The describing students found it difficult to find words or phrases which would allow the blind group to mentally visualize the picture as they themselves were seeing it. Language presented a few obstacles. The English students did not understand some of the French descriptors and the French students missed out on some of the English descriptors. It was felt that shades of meaning which might be important were lost in the translation. The describers usually started out with fairly general descriptions such as "it is a winter scene" or "it is a picture of a baby." They then attempted to fill in the details.

The blind group was allowed to ask questions of the describers. After seeing the picture, they learned that the answers to the very concrete and specific questions had provided the most useful data. The blind students stated that they immediately formed an impression of the picture with the first descriptions given. They felt that this first impression related to something they had seen or experienced. Each subsequent piece of data added to and altered that impression.

When the describers had exhausted their ability to describe, the blind students had to form a mental image of the picture before being allowed to see it. Some students revealed that they were left with several mental images and found it difficult to choose one.

Class No. IV: Film, "The Eye of the Beholder":

The focus of this class was to explore the variables which influence

how one interprets one's observations or perceives a situation. Specific objectives for the students included:

- 1) To discover the variety of interpretations that may be placed on a single stimulus situation.
- 2) To examine the variables which influence how one observes.
- 3) To explore ways of monitoring the influencing factors relating to one's perceptions.

The film demonstrates how perception of the same event varies from person to person depending on his feelings and on what the person is prepared for or wishes to see. It also demonstrates how a person often simplifies things not understood so that he may leave out important facts or substitute others even if distortion results. The film depicts a day in the life of a man by the name of Michael as observed and interpreted by several people. His mother considers him a dreamer, a taxi driver calls him a professor, his landlord refers to him as a lunatic, a waiter sees him as a lady's man, and his cleaning lady thinks he is a murderer. Following these interpretations, there is a short break in the film. At this point the students were asked for their impressions of Michael's experience. The film ended with Michael's interpretations of the events of the day.

In order to facilitate discussion, the following questions were explored:

- 1) What were some influencing factors that caused each person to misinterpret Michael's experience?
- 2) How did Michael's behavior contribute to their misinterpretation?
- 3) How may one promote the accurate interpretation of an event or an experience?

At the break in the film, the students were at a loss as to how to interpret Michael's behavior. They felt that each of the interpretations presented was plausible but that it was highly unlikely that they were all accurate. A few new interpretations were thrown forward as being equally plausible.

Students suggested that the mother saw what she wanted to see and that the taxi driver had selected a portion of what he had observed and based his interpretation on that. They thought that the waiter and the cleaning lady might have based their interpretations on their past experience with other men who reminded them of Michael. The students assessed Michael's behaviour as somewhat extreme in nature and attributed the wide variety of interpretations to this.

COMPARISON OF PRE AND POST-TEST:

An analysis of the pre and post-test revealed that a few students had more data of a descriptive nature on the pre-test than on the

post-test. Some students' responses to the pre and post-test were essentially the same, however, for most students, change from the pre and post-test was readily identifiable.

Timing:

The students took more time to complete the descriptions of their observations on the post-test. They took an average of one half hour to complete the pre-test and forty minutes to complete the post-test.

The written descriptions in the post-test became more specific and detailed. Statements such as "the baby is happy" or "she is a good mother" decreased in number; rather, the smile on the baby's face and the behavior of the woman were described. Responses to the post-test included fewer generalizations and assumptions without substantiating data, and few value judgments about the interactions between the woman and the child. In general, the observations more clearly revealed the content of the video tape recording.

Organization of the Data:

There was a change in the order of the data presented. More emphasis appeared to be placed on observing and describing the appearance and behavior of the woman and the child. Descriptions of the setting, although more clearly described, played a less significant role. Descriptions were presented in a more organized and grouped fashion with less jumping from one focus of observation to another.

Use of Data:

Students attempted to place meaning on their observations in both the pre and post-test. In the pre-test there were more statements such as "the mother is reinforcing the child's behavior." In the post-test the descriptions would read, "by saying good boy, the woman is reinforcing the child's attempt to feed himself." There was greater use of substantiating data to support the interpretations of their observations.

CONCLUSION:

The observational process in nursing extends beyond observing and recording based on perceptual skills and knowledge. Also needed are the cognitive skills to assess the state of the patient and plan patient care; for these skills, theoretical knowledge as well as empirical knowledge is necessary. The students were concurrently engaged in acquiring the related and relevant theoretical scientific knowledge that is needed in order for an efficient and effective plan of care to evolve.

Each phase of the program described pertained to a portion of the process of gathering empirical knowledge. The pre-test revealed where the students were in terms of their observational skills prior to

implementation of the program. In addition to providing a means for assessing change in observational ability, this information is necessary to develop a teaching process responsive to student needs.

Throughout the program the variables that the students were asked to attend to increased in number and the analysis carried out became more complex and comprehensive. Initially the students were skeptical about the relationship of these classes to the learning and practice of nursing. Gradually, through their clinical experience, the relevance and significance of learning to gather data systematically became more evident to them. The post-test revealed change in the data gathered by a majority of the students. The total program focused on allowing the students to engage actively in the process of acquiring empirical knowledge with the intention that, as the students progressed in learning to nurse, the data base from which they derived their plan of care would become more comprehensive, relevant, valid and reliable.

REFERENCES:

- Bruner, Jerome. *The process of education*. Cambridge: Harvard University Press, 1960.
- Hooton, Margaret. The B.Sc. (N.) Program at McGill. *Nursing Papers*, 1976, 7 (4), 14-19.
- Peplau, Hildegard. What is experiential teaching? *American Journal of Nursing*, 1957, 57, (7), 884-86.
- Riley, Irma. The B.Sc. (N.) Graduate as a nurse practitioner. *Nursing Papers*, 6 (2), 19-20.

RESUME

L'apprentissage de l'observation

Ce compte rendu décrit un programme d'apprentissage visant à développer l'habileté d'observation; il fut administré à des étudiants du baccalauréat en sciences infirmières durant les six premières semaines d'études. Le but général était de présenter aux étudiants une façon d'apprendre qui met l'accent sur l'observation en tant qu'habileté primordiale de l'infirmière et que méthode d'étude importante.

Le programme consiste en une série de six cours et inclut une épreuve avant et après son administration. Ces cours ont porté principalement sur le processus d'apprentissage plutôt que sur la matière ou sur les résultats de cet apprentissage. Chaque phase du programme se rapportait à une partie du processus par lequel l'étudiant acquiert un savoir empirique. Le contrôle précédant la mise en oeuvre du programme a montré le niveau de compétence des étudiants en matière d'observation. Au fur et à mesure que le programme s'est déroulé, on a augmenté le nombre et la complexité des variables que devaient observer les étudiants. L'épreuve en fin de cours dénote un changement dans les données recueillies par la majorité des étudiants; ces renseignements ont été évalués au point de vue du moment des observations, de leur qualité, de leur organisation et de leur utilisation.