indicators of behaviours that exemplify internationalization of these values is essential for measurement of values inherent in learning the *art* of nursing.

REFERENCES

Barnett, Kathryn. A theoretical construct of the concepts of touch as they relate to nursing. *Nursing Research* 21:102-110. March-April, 1972.

Durr, Carol A. Hands that help . . . but how? *Nursing Forum* 10: 393-400. 1971.

Hall, Edward T., *The Hidden Dimension.* Garden City, New York: Doubleday, 1966.

Krathwohl, David R., Benjamin S. Bloom, Bertram B. Masia. *Taxonomy of Education Objectives, Handbook II: Affective Domain.* New York: David McKay, 1956.

Krieger, Dolores. Therapeutic touch: The imprimatur of nursing, *American Journal of Nursing* 75: 784-787, May 1975.

Rubeck, Robert F. A. model for non-verbal and verbal assessment of affective learning. *Education Technology* 28. August. 1975.

SPECIFYING AFFECTIVE BEHAVIORAL INDICATORS IN NURSING: A RESPONSE

Dorothy Pringle*

Quiring and Rubeck address an important yet underdeveloped aspect of nursing education: the specification and measurement of learning in affective areas. Unfortunately, I do not find that the model presented helps expand my ability to construct affective objectives, for several reasons.

First, not enough information is provided about the model to enable the reader to apply it satisfactorily; for example, no criteria are described for including statements under each category. The examples relied upon to convey this information are not sufficient for me. Rubeck's original article (1975) on the model offered different criteria than this paper does.

Second, and more important, the conceptual basis for this model is not clear. I felt there was an implied relationship with Krathwohl, Bloom and Masia's *Taxonomy* in the affective sphere (1956), but Rubeck does not refer to this material in his original work. Nevertheless, the lower end of the continuum in the *Taxonomy* (receiving, responding, valuing, p. 37) is congruent with Rubeck's indicator categories (attends, responds, controls, includes, supports, perseveres) and by reviewing the rationale for selecting these terms in the

* Dorothy Pringle, formerly Director of Laurentian University's School of Nursing, is now studying at the University of Illinois.

Taxonomy (pp. 24-38) it is possible to appreciate the affective implication of Rubeck's indicators. The higher level *Taxonomy* categories (organization, characterization of a value complex, p. 37) are not represented. If Rubeck did not utilize the *Taxonomy* to generate aspects of his model, it is not clear why he selected his categories.

Third, I do not believe the authors' examples of affective indicators are necessarily evidence of affective learning. Several indicators require a knowledge of theory and practice principles and may be no more than a measure of the application of this knowledge; e.g. "discusses dying experience with patient", "discusses various types and responses to touch", "correctly performs a procedure involving touch". In most cases an observer could assume affective learning had occurred, but this could not be guaranteed because the whole issue of the motive underlying the behavior has not been addressed. I find the *Taxonomy* to be superior to this model both for defining objectives and for suggesting methods of testing for their achievement.

My final major concern is the method suggested for evaluating the effectiveness of affective learning. Simply counting up the number of indicators present is an approach which fails to account for the relative importance of various objectives and time. Some objectives must be achieved; others are relatively marginal to students' essential learning.

Several other features of this paper give rise to what may be picayune concerns, but ones which nonetheless affect my appreciation of the model. 1) The paper seems to imply that both verbal and non-verbal behaviors are involved only in affective spheres. Verbal and non-verbal behavior complicate objective setting in cognitive and psychomotor spheres as well. 2) The sequencing of verbal and non-verbal indicators in the examples is out of order and does not achieve Rubeck's own intent (1975, p. 30) that indicators be "incremental steps leading to . . . the behavior desired." 3) The affective objective in both examples includes the term "comfortably", yet there are no indicators that address the achievement of this aspect of the objective.

In conclusion, a model that specifies only affective objectives for a learning experience seems inappropriate for use at this time in nursing education, as would be a model that discusses only cognitive or only psychomotor learning. What we as educators need is a model that helps us to identify the interrelationship of cognitive and affective learning so both can be adequately defined for students' learning.

References

Rubeck, Robert F. A model for non-verbal and verbal assessment of affective learning. *Educational Technology.* August, 1975.

Krathwohl, D. R., Bloom, B. S., Masia, B. B. *Taxonomy of Educational Objectives. Handbook II: Affective Domain.* New York, David McKay, 1956.

Vers une précision des indicateurs de comportement dans le domaine affectif en sciences infirmières

Dans l'enseignement des sciences infirmières, on formule souvent des objectifs d'apprentissage dans les domaines cognitif (connaître) et moteur. Cependant, les comportements dans le domaine affectif (sentiments, émotions) sont plus difficiles à préciser. Pour faciliter une méthode pratique de mesure des objectifs d'ordre affectif, les auteurs présentent un modèle en six étapes. On peut utiliser ce modèle comme guide pour élaborer un objectif et spécifier le comportement verbal ainsi que le non verbal indiquant l'atteinte de cet objectif. Le modèle est ensuite appliqué à deux situations de sciences infirmières ayant trait au domaine affectif, l'une se rapportant à l'approche de la mort, l'autre à l'apprentissage du toucher thérapeutique.

Réponse de Dorothy Pringle. On a décélé plusieurs difficultés dans cet exposé. On ne peut considérer les indicateurs d'ordre affectif comme une preuve d'apprentissage de cette nature sans parler des motifs du comportement observé. La base conceptuelle du modèle n'est pas claire et l'on ne dispose pas d'informations suffisantes pour permettre au lecteur de l'appliquer. Ce dont les éducateurs ont besoin, c'est d'un modèle qui les aide à comprendre les rapports entre l'apprentissage cognitif et affectif.