



TEACHING IN SCHOOLS OF NURSING

**STUART M. SHAFFER
KAREN L. INDORATO
JANET A. DENESELYA**

TEACHING IN SCHOOLS OF NURSING

STUART M. SHAFFER, B.A., M.A., Ph.D.

Co-director, Education and Psychologic Consultants, Pittsburgh, Pa.;
formerly Assistant Director of Planning and Development,
Pittsburgh Public Schools, Pittsburgh, Pa.

KAREN L. INDORATO, R.N., B.S.

Formerly Instructor, Liliane S. Kaufman School of Nursing,
Montefiore Hospital, Pittsburgh, Pa.

JANET A. DENESELYA, R.N.

Instructor in Medical-Surgical Nursing, Liliane S. Kaufman School of Nursing,
Montefiore Hospital, Pittsburgh, Pa.

THE C. V. MOSBY COMPANY

Saint Louis 1972

Copyright © 1972 by The C. V. Mosby Company

All rights reserved. No part of this book may be reproduced in any manner
without written permission of the publisher.

Printed in the United States of America

International Standard Book Number 0-8016-4531-X

Distributed in Great Britain by Henry Kimpton, London

TEACHING IN SCHOOLS OF NURSING

PREFACE

Changes in nursing education over the past hundred years have been minimal. Generally, where nursing education programs have been implemented, models of older education systems such as the Nightingale school have been used. Students interested in nursing worked in an apprenticeship hospital program under the direction of nursing instructors whose preparation was often limited to completion of a basic nursing program. Many long and difficult hours of experience were deemed necessary to the completion of a nursing education. The educational procedures were not well planned and clinical instruction was often the responsibility of graduate nurses and physicians when they could spare the time or needed the student's services for a specific task. A nurse's education consisted primarily of experience in daily hospital nursing practice and observations of patients with various disorders.

As the field of medicine and health care in general progressed and became more complex, the role of nursing in patient care became more and more diffuse. Established schools of nursing slowly attempted to keep pace with the evolution of modern health care. The current emphasis on professionalism and higher education in nursing has not brought substantial changes in nursing education, nor in the preparation of nurses who assume the responsibility of carrying out that education—the nursing instructor.

We contend that when nurses complete a program granting a Bachelor of Science or Masters Degree in Nursing, they automatically have fulfilled the instructor selection criteria for over 90% of the schools of nursing in the United States. This, despite the fact that their training has been concentrated almost exclusively on nursing, with at most one or two courses in education and little supervised teaching experience. Their technical knowledge may be excellent, though their teaching skills are totally untried. Upon assuming an instructor position, the neophyte nursing instructor will receive minimal training and supervised teaching experience.

How the new instructor without experience in teaching will cope with situations presented by the teacher-student relationship is a pressing problem. Recognizing this lack and desiring further education, the new instructor may enroll in an advanced nursing program in an attempt to fill the need in preparation for teaching. And yet how many advanced nursing education courses present such a program?

... crowding the undergraduate curriculum with applied professional content prevents the inclusion of many courses foundational to graduate

work. Thus, on the graduate level a student is always patching, is always excusing an inadequate background, and is always educationally handicapped, and many masters programs are essentially remedial. (Reinke-meyer, 1970)

The one or two basic education courses provided in bachelors programs deal mainly with statistics and scholastic aptitude. A masters program, geared to a particular nursing specialty, may allow the nurse to accrue a few more education courses as electives. Ironically, programs providing a degree in nursing education have been received with much controversy in recent years, thus hindering the motivation for nurses to enter such a program.

Peipgras (1969) further emphasized this inadequacy in the preparation of nurses for education when she wrote:

Diploma nurses are not taught educational tests and measurements; they do not study curriculum planning; nor are they given any formal instructions in education. All this comes on the masters level. In some schools, baccalaureate nursing students do take some education courses, but the nurse with the masters degree in nursing education is the only one who is universally recognized as having the formal qualifications for teaching in an educational institution.

With avenues for self-improvement through formal education programs ineffective, nonexistent, or inaccessible, instructors are left to improvise and develop teaching skills independently. Teaching effectiveness can best be evaluated in terms of the skills demonstrated. Instructors remember the qualities they observed and admired in their nursing instructors, and they have a general idea of what they would like to accomplish with their own classes. But they lack the experience and knowledge necessary to help themselves accomplish these goals. They do not know how to determine objectively whether their skills are effective. Instead they must seek out methods for providing feedback to themselves that would indicate their effectiveness and specific areas for improvement. Eagerly they question experienced educators on what and how they teach, observing their methods, hoping to assimilate some of their teaching skills and abilities.

New instructors are eager to involve themselves in teaching, but they experience inner fears and insecurities when facing a classroom filled with students. Regardless of all the confidence they may display, they suddenly lack confidence in their own knowledge and ability. They ask themselves how they will respond when asked a question they cannot answer conclusively and how they will handle a defensive or challenging student. New instructors are confronted by these and many other questions when they begin to work in the classroom. The experienced instructors to whom they turn for guidance have not themselves received frequent professional feedback on their effectiveness in the classroom. Even these time-tested educators will occasionally find themselves involved in classroom management problems from which they do not know how to extricate themselves; nor do they have anyone to whom they can turn for assistance.

It is expected that if nursing instructors are aware of those principles that can serve to improve the academic performance of their students, they will have fewer problems related to their students' nonacademic behaviors. Instructors who develop teaching skills necessary to govern classroom performance will rapidly discover how extensive is their influence on the learning situation. Based on this premise and recognizing the dilemma of nursing instructors trying to teach with little or no preparation for teaching, this book has been prepared to provide information that will help nursing instructors gain the skills to make them more proficient in the use of effective teaching practices. It is our intent that the material will further serve as a means to improve classroom and clinical management, and to help prevent educational problems from arising. The purpose of this book is to teach nurses how to teach.

Stuart M. Shaffer
Karen L. Indorato
Janet A. Deneselya

CONTENTS

Chapter 1 The development of nursing education, 1

- Early history of nursing, 1
- Kaiserwerth, 1
- Nursing education and the military, 2
- Educational trends in the 19th century, 2
- Educational programs for nurses, 3
- The nursing curriculum, 4
- Evaluation techniques, 5
- Nursing instruction, 5

Chapter 2 Educational psychology: an historical perspective, 7

- The traditions of psychology, 7
- Educational psychology, 11

Chapter 3 Biases in education, 13

- Focus on undesirable behavior, 14
- Emphasis on disciplinary measures, 15
- Failure to specify desired behaviors, 16
- Indiscriminate reinforcement, 18
- Failure to use successive approximations, 19
- Responding to labels, 20
- Excessive teacher personalization, 20
- Student-instructor conflicts, 21
- External explanation of causation, 22
- Self-evaluation, 23

Chapter 4 A methodology of behavior modification, 24

- Behavior, 24
- The reasonableness of behavior, 25
- Reinforcement, 26
- Reinforcer identification: hypothesis testing, 27

- Stimulus, 27
- Positive and negative reinforcement, 28
- Schedules of reinforcement, 29
- Behavior chain, 30
- Stimulus generalization, 31

Chapter 5 Teaching and behavior modification: a teaching technology, 32

- Educational variables, 33
- Behavior modification in the classroom, 34
- Control, 36
- Classroom climate, 37
- Transfer of training, 37

Chapter 6 Advanced concepts in a teaching technology, 38

- Responsiveness, 38
- Nursing education: its unique setting, 39
- Individualized instruction, 41
- Individualized learning, 42

Chapter 7 The measurement of learning, 43

- Testing, 44
- Aptitude tests versus achievement tests, 45
- Items and objectives, 46
- Item pools, 46
- Incidental learning, 47
- Testing intervals, 48

Chapter 8 Evaluation of teaching, 49

- Classroom performance, 49
- Instructional objectives, 50
- Teacher classroom preparation, 52
- Evaluation methodology, 53
- Supervised teaching, 54

Chapter 9 Programmed instruction, 55

- Theoretical basis of programmed instruction, 56
- Programmed instruction format, 56
- Linear and branching programs, 57
- Testing and feedback, 58
- Individual learning patterns, 58

Teacher-made programs, 59
Evaluating programs, 67

Chapter 10 Planned instruction, 69

Instructional variables, 70
Token-economy classroom, 72
Contingency contracting, 73
Instructional team, 74
Open classroom, 77

Chapter 11 The clinical conference as a teaching aid, 80

Planning, 81
Use of behavior modification, 82
Evaluation, 82

Chapter 12 Use of multimedia techniques in nursing education, 84

Selection, 85
Transparencies, 86
Slides and filmstrips, 87
Films, 87
Video tapes, 88
Audio tapes, 89
Multimedia library, 89
Summary, 90

Chapter 13 Curriculum development, 92

Curriculum components, 92
Objectives, 95
Teaching methodology, 96
Media, 96
Evaluation, 97
Dissemination of curriculum, 98

Appendix 1, 100

Appendix 2, 101

Appendix 3, 102

Appendix 4, 103

Bibliography, 104

THE DEVELOPMENT OF NURSING EDUCATION

Nursing education as a distinct element of society has a very short history. Although the development of nursing itself probably began somewhere in the origins of civilization, specialized training for nurses did not emerge as a popular movement until the middle of the nineteenth century. It is Florence Nightingale who is credited with the founding of nursing education. Although many individuals contributed to this achievement, it was through the efforts of this one woman that education specific to the training of nurses became a reality, with the opening of the first nursing school hardly more than a century ago.

Early history of nursing

Before the mid 1800's, nursing was a field with little organization. If professionals today find it difficult to define nursing, they might consider the task of describing the nurse at any time prior to 1860. The principle function of nursing has always been the care of the sick. It would be futile, however, to make any general statement about the people who administered that care, much less the system that provided the knowledge used in their practices.

Probably all societies have depended upon women to furnish the care for their sick. Mothers cared for the sick in their own families, and women cared for one another in childbirth. Any skills developed through these experiences were informally passed from one to another. Although some members of earlier societies may have been singled out as "nurses" because of their abilities in providing care, there was no organization among them or any structured training of any kind.

During the European medieval period many religious groups based on Christian philosophy were founded, such as the Sisters of Charity and the Poor Clares. Although exclusively religious in orientation, these groups did assume some responsibility for care of the sick and needy. Severely limited in facilities and instruction, their attempts at service met with much discouragement. In addition, their vocation demanded primary attention to religious duties, hampering their effectiveness in public service. Nevertheless, several of these orders did achieve a relatively high level of effectiveness, which has persisted to the present time.

Kaiserwerth

Another religious and public service group was an order of protestant deaconesses in Kaiserwerth, Germany, which began in the early nineteenth century.

A more modern order, it reflected some of the more advanced social principles of that period. Not only were its members free from any religious vows, but they received more structured training, with emphasis on social service rather than religious duty.

Founded by a minister and his wife, the training program offered preparation for the care of infants, home visiting, rehabilitation of prisoners, teaching of children, and care of the sick. In addition, the young women were offered instructions in reading, writing, and arithmetic, and counseling in their personal ideals and religious beliefs. Although this particular program did not offer training specific to the preparation of nurses, it certainly contributed to the ultimate development of nursing education. It signaled a new concept in the social position of women and in the use of education for fields of social service.

Nursing education and the military

Warfare creates new demands for nursing. The need for nursing in any military conflict is obvious. However, any development in the training of nurses growing out of this need prior to the 1800's was negligible. Armies were usually accompanied by a mass of women or troop followers, who tended to the injured and sick by whatever means available. Some armies organized corps of physicians, who accompanied the troops and trained assistants to help care for the wounded. When trained nurses became available, military groups organized and used their services; few provided any such training themselves, however, until Florence Nightingale was commissioned to organize a corps of nurses to serve in the Crimean War, thus leading to the institution of training for nurses.

Educational trends in the 19th century

Prior to the educational advancements that grew out of the study of learning, schooling was a luxury for the wealthy and the very gifted. In fields of intellectual pursuits, most teaching was carried out in a conversational mode, either in a tutoring situation, in small group discussions, or in lectures and orations. The training of manual skills was performed by trade masters, who, in carrying out their occupations, passed on the specifics of the trade to their assistants.

Little investigation had been made into the phenomenon of learning or methods of stimulating learning until the early 1900's. Teaching was mostly limited to lecture, demonstration, and private study. Some textbooks were available, usually limited to the works of one author. The supply and availability of these books were minimal.

In the nineteenth century, education became available for more people. Programs were more structured, and teaching materials more accessible. The idea of the need for educational preparation in specific fields ventured forward and began to gain in popularity. As the public became more aware of its critical social needs, the role of women in society also grew in prominence. All of these events helped to create the setting for the emergence of nursing education.

Educational programs for nurses

The first school established specifically for the training of nurses was founded in 1860 in St. Thomas Hospital, London, by Florence Nightingale. This event was quickly followed by the development of similar schools, particularly in the United States. The first of these was Bellevue Hospital School of Nursing in New York, founded in 1873. Two others, the Boston Training School for Nurses at Massachusetts General Hospital and the Connecticut School for Nurses of New Haven Hospital, were opened later that same year.

These schools followed a pattern similar to that of the Nightingale school. Miss Nightingale developed her school on the premise that those who assume the care of the sick should receive specific training for that purpose. Through her efforts in the Crimean War, Miss Nightingale proved that trained nurses were much more effective and efficient than nontrained nurses. She proposed that such training be carried out in a hospital setting and that the hospital utilized be established specifically for the purpose of providing that educational setting. It was Miss Nightingale's contention that control over the training of nurses should remain with the schools themselves rather than with the hospitals, which would receive the services of these nurses and be in a position to exploit them.

Because one of the primary purposes for nursing education was to establish suitable positions for women, Miss Nightingale was greatly concerned with the social and moral status of her students. She established rigid and explicit behavioral rules governing the personal lives of her students.

As other schools following the Nightingale educational pattern were created, subtle differences and adaptations were made. One variation resulted from the need for support and funds from prominent groups and individuals to back the schools. The nursing needs of the poor varied somewhat from the needs of the wealthy, who were interested in obtaining trained nurses for private home nursing. This contrasted with a more general need for nurses to serve in hospitals. This and other controversies surrounded the initiation of these schools and created slight variations in the philosophy of each. The eventual result was control of training programs by hospitals, whose primary interest was in supplying nursing service to their patients, often at the expense of the educational program itself.

The demand for nursing education increased, leading to the introduction of a collegiate program for nurses at Teacher's College of Columbia University in 1899. This program was not a basic nursing program, but it offered an opportunity for trained nurses to expand their studies. The program was popular among nurses in positions of school or hospital administration, but it did not attract the nurse engaged in general-duty nursing. Even when the University of Minnesota opened a nursing program in 1909 for students who had received no previous training, the nurses prepared by the program did not seek positions in general nursing, but merged into the administrative ranks. These programs continued to increase in quality and number, gradually becoming available to more people and eventually providing more educational preparation for instructional and supervisory personnel. While the bulk of the nation's general nurses were still being prepared in

hospital-based programs, the emphasis on general education for nurses was restricted to the collegiate programs, which were free from the pressure of providing immediate nursing care.

As educational advancements in nursing gained in popularity, two new types of programs emerged in response to the rapidly increasing need for more nurses. One was the practical nurse program, which emphasized the technical skills of nursing, to be carried out under the direction of a professional nurse. The second was the associate degree program, which maintained its base in the college setting; this program prepared nurses who were eligible for professional licensing and who had some preliminary credits toward a college degree. The report of the Surgeon General in 1963 advanced the cause of the collegiate programs and stressed the need for nurses in greater numbers and quality.

The nursing curriculum

The translation of the purpose of nursing education into a curriculum began with the original program established by Florence Nightingale. She asserted that nurses' training should take place in a hospital. The bulk of her curriculum was practical experience. The trainee received experience in various assigned areas, such as meal preparation, ward duty, and night duty. Textbooks were limited to physicians' notes and books on home nursing prepared by Miss Nightingale herself. Miss Nightingale developed the curriculum from her own conception of what nurses should be able to do. At that time, there were no other service personnel in hospitals, aside from the nurses themselves. Nurses had to be taught to prepare meals, adjust diets to meet the physicians' directions, provide clean linens, clean the patients' rooms, provide the specific nursing care needed by each patient, and carry out essentially all measures needed to assure a healthy environment for the patient. Eventually hospitals were convinced of the necessity to hire auxiliary personnel to relieve nurses of the more menial tasks.

In the United States, schools followed curricula similar to that of the Nightingale school. As a carry-over from the apprentice positions so common in the crafts, the emphasis on experience as a teaching technique was repeatedly expressed in chronicles of the period. In fact, the idea that training experience should be laborious and stringent is boldly stated. As there was no established criterion for what nursing schools should provide, each was established on an idea of what a nurse would be expected to do. There was pressure to assure that before trainees be permitted to practice in the hospital they would be able to safely move and care for a patient, thus initiating the laboratory experience as an important part of nurse preparation. What lectures there were, were conducted primarily by physicians, with a great deal of bedside teaching.

With the introduction of collegiate programs, it became necessary to seek different means for teaching nurses to augment the bedside experience, which was limited in the college setting. This led to the investigation and implementation of various other teaching methods, such as the laboratory, discussions, models, and other visual aids. In most programs today, teaching methods are employed with

newer techniques and with teaching procedures taken from other fields and adapted to nursing education. Contrary to the origins of nurses' training, practical experience is no longer the sole element of the nursing curriculum.

Evaluation techniques

Evaluation methods employed in the earlier schools were primarily dependent on subjective observations. Some attempts were made to standardize these observations with descriptive accounts of what a student should be able to do, as compared to what she actually did. However, practical experience is difficult to evaluate, and direct observation is certainly the easiest approach. As long as schools depended on practical experience for their teaching program, evaluation of that segment of the program could not be guaranteed to be objective.

As the expectations of nurses and students at various levels in their preparation became more definitive, more valid evaluation became possible. The expansion of teaching techniques to include objective testing augmented the evaluation. Eventually more refined testing, such as the National League for Nursing (NLN) test library, became possible, enhancing the usefulness of test result correlation and analysis.

The efforts of the National League for Nursing to standardize nursing education began to gain momentum in the early 1900's. Among the criteria put forward by the League were proposals for uniformity in types of experience, qualifications of faculty, structural development of the school, and other ideas designed to help schools train nurses of similar caliber and high quality. The League continues to function in this capacity in evaluating schools of nursing and establishing standards for these schools.

One major advancement in evaluation and standardization of nurses has been the program for licensing professional and practical nurses. Although each state issues its own license, the examination given for qualification for licensing is standardized throughout the country and requires that to be licensed any new graduate must meet at least minimum standards. These methods serve to provide some standardization and preliminary screening of graduate nurses.

Nursing instruction

Chemists teach chemists, and automobile mechanics teach automobile mechanics; in the same manner, nurses teach nurses. Ironically, when nursing education was admitting its first students to the newly founded programs, there was no one qualified to teach them. There were no trained nurses, much less nurse educators. Skills were being taught, though the educational procedures for teaching them had never been developed. Hospital staffs were made up of untrained women, most of whom were not only unqualified to teach, but needed considerable training themselves. In many cases, the students taught themselves and each other. Eventually trained nurses were prepared, and they could teach others. As the collegiate programs became available to provide additional education for nurses, instructors had the opportunity to gain added training in nursing education. Until

the release in 1963 of the Surgeon General's report, which prompted the trend toward higher education for nurses, few instructors actually acquired the preferred educational level. Now, as more nurses and nursing instructors receive the available education, it is becoming obvious that the existing programs do not offer much in the way of educational training.

While the nurse is given ample experience in a variety of specialized fields, little emphasis is given to teaching the nurse how to be a teacher. Many more nurses than ever before are asking for training in education; yet the few nursing programs of a specifically educational nature are being reduced and replaced by greater nursing specialization. It appears as though nursing school administrators feel that to teach nursing, a nurse need only know nursing; the teaching will come naturally. This is contradictory to the many advancements in educational research. Teaching does not come naturally, if it is to be effective and efficient. The necessary skills can and must be learned for a nursing instructor to become a successful and productive teacher.

EDUCATIONAL PSYCHOLOGY: AN HISTORICAL PERSPECTIVE

It may seem odd to the reader that a chapter on historical information is included in a textbook of methodology. Because of the proliferation of information in nursing and education in scientific journals, writers are generally encouraged to make introductions short and to the point. This practice has resulted in authors ignoring a significant amount of information that would provide a clearer understanding of where the present work fits in with previous information. In discussing this problem as it relates to psychology, Watson (1962) wrote:

It is not surprising then that readers, especially among younger psychologists, may slip into thinking that this work began with 'Brown (1959)'...since this is the only work cited.

The result is a loss of perspective, which denies the reader the opportunity to decide if the current work actually represents a step forward toward the solution of a problem. In addition, the historical perspective permits the reader to get a feeling for the direction in which the field is progressing. That is, one can see the dynamics of growth, presented in information that may help to make the present material more interesting and more exciting.

The traditions of psychology

The methodology of behavior modification represents a logical step in the development of psychology. Furthermore, the information learned by behavioral theorists in psychology laboratories has directly resulted in the development of the field of educational psychology. Among the most significant events in the development of behavioral modification was the work of Darwin during the early part of the nineteenth century. His work on the theory of evolution culminated over twenty years of research and was directly responsible for moving psychology toward a biological tradition. This direction became most obvious in his work entitled *The Expression of the Emotions in Man and Animals*. Darwin's thesis was that anatomy and the expression of behavior were important only to the extent that they contributed toward the survival of the animal. If animals express differences in structure and/or behavior, the reasons for these differences are generally a function of the different demands placed on the different species. Within each species, structure and behavior are genetically transmitted.

Initially, Darwin's work most influenced Galton in his studies of individual