

ED 022 852

PRACTICAL NURSING EDUCATION TODAY; REPORT OF THE 1965 SURVEY OF 722 PRACTICAL NURSING PROGRAMS.

National League for Nursing, New York, N.Y. Dept. of Practical Nursing Programs.

Pub Date 66

Note-38p.

Available from-National League for Nursing Department of Practical Nursing Programs, 10 Columbus Circle, New York, New York (\$2.00).

EDRS Price MF-\$0.25 HC Not Available from EDRS.

Descriptors-ADMINISTRATIVE ORGANIZATION, ADMISSION CRITERIA, ADVISORY COMMITTEES, CURRICULUM, EDUCATIONAL FACILITIES, EDUCATIONAL FINANCE, ENROLLMENT TRENDS, FACULTY, *HEALTH OCCUPATIONS EDUCATION, LIBRARY FACILITIES, *NATIONAL SURVEYS, POST SECONDARY EDUCATION, *PRACTICAL NURSES, PROGRAM EVALUATION, PROGRAM LENGTH, QUESTIONNAIRES, STUDENT CHARACTERISTICS

Identifiers-Manpower Development and Training Act Programs, MDTA Programs

"Education for Practical Nursing, 1960," the report of a survey, recommended the development of criteria for program evaluation. Published in 1965, these criteria served as the basis for a questionnaire to collect data on 722 practical nursing programs. Data analyzed in the light of the 1960 survey showed (1) an upward trend in students' educational backgrounds, (2) fewer programs paying student stipends, (3) a written philosophy and objectives for most programs, (4) more clinical instructors employed by the controlling agency and learning experiences selected by the instructors, (5) more programs including care of mentally or emotionally disturbed patients, (6) experimentation in providing an integrated curriculum, (7) inadequacy of library holdings in many programs, and (8) serious dropout problems in some programs. In 61 Manpower Development and Training Act (MDTA) programs, analyzed separately, wide variations were found. Some recommendations were for (1) utilization of effective screening tests, (2) faculty selection on the basis of teaching preparation and knowledge of practical nursing education as well as a degree, (3) budgetary provision for adequate libraries, (4) discouragement of programs with small enrollments, and (5) studies of available educational and clinical resources and faculty before initiation of new programs. (JK)

PRACTICAL NURSING EDUCATION TODAY

NATIONAL LEAGUE FOR NURSING
Department of
Practical Nursing Programs
1966

DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
DONOR OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

PRACTICAL NURSING EDUCATION TODAY

*Report of the 1965 Survey
of 722 Practical Nursing Programs.*

NATIONAL LEAGUE FOR NURSING
Department of
Practical Nursing Programs

10 Columbus Circle, New York, New York 10019

1966

Code Number: 38-1244

Price: \$2.00

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY NATIONAL LEAGUE FOR NURSING TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U. S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

COPYRIGHT, 1966, BY

NATIONAL LEAGUE FOR NURSING

All rights reserved. This book, or parts thereof, must not be reproduced in any form without permission of the publisher.

PRINTED IN THE UNITED STATES OF AMERICA

CONTENTS

I. INTRODUCTION	1
Influence of NLN's Practical Nursing Activities	1
Effects of Legislation	2
Analysis of the Data	3
II. THE PRACTICAL NURSING PROGRAMS	4
Administrative Control	4
Size of Programs	5
III. PHILOSOPHY AND OBJECTIVES	6
IV. ORGANIZATION AND ADMINISTRATION	7
Advisory Committee	7
Budget	7
Contracts With Cooperating Agencies	7
V. CURRICULUM	9
Length	9
Curriculum Content	9
Evening and Night Experiences	10
VI. FACULTY	12
VII. STUDENTS	15
VIII. FACILITIES AND RESOURCES	18
Library Resources	18
IX. EVALUATION	21
Licensure Examinations	21
Evaluation of the Program	21
Follow-up of Graduates	21
X. ANALYSIS OF MDTA PROGRAMS	23
XI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	25
APPENDIX	28

Tables

1. Admissions and Graduations, Academic Years 1959-60 to 1963-64	4
2. Distribution of 721 Practical Nursing Programs by Administrative Control, 1964-65	4
3. Practical Nursing Programs in High Schools, 1964	4
4. Number of Practical Nursing Programs by Size of Student Body	5

Tables — *Continued*

5. Delegation of Responsibility for the Development of Objectives in 662 Practical Nursing Programs, by Size of Student Body	6
6. Functions of Advisory Committees Reported by 609 Programs	7
7. Delegation of Responsibility for Determining the Budget in 704 Programs, by Type of Financing and Administrative Control	8
8. Distribution of 611 Programs by Curriculum Pattern and Administrative Control ...	11
9. Distribution of 582 Programs by Curriculum Pattern and Size of Student Body	11
10. Experiential Background of Director/Coordinators of 722 Programs	13
11. Summary of Affirmative Responses Regarding Written Job Descriptions and Personnel Policies	13
12. Summary of Affirmative Responses Regarding Statements Included in Written Job Descriptions and Personnel Policies	13
13. Distribution of Programs Requiring Preadmission Examinations by Administrative Control and Test Used	15
14. Age Distribution of Students, 1960-61 and 1963-64	16
15. Number of Students Admitted to Practical Nursing Programs by Previous Education, 1959-60 — 1964-65	16
16. Number of Students Given Financial Assistance in 722 Programs by Type of Assistance and Administrative Control of Program	17
17. Contractual Arrangements Regarding Use of Facilities in Cooperating Agencies	18
18. Number of Programs With Practical Nursing Collections by Library Resources and Administrative Control	19
19. Data Used in Evaluation of the Program	21
20. Distribution of 23,608 Graduates by Type of Employment or Continuing Education and Administrative Control of Program	22
21. Enrollments, Withdrawals, and Graduations in 15 MDTA Programs and Performance of Graduates on Licensure Test	24

INTRODUCTION

It has been five years since the first national questionnaire study of practical nursing programs was carried out by the National League for Nursing with the cooperation of the U.S. Office of Education and the U.S. Public Health Service. The findings summarized in the report of that survey, *Education for Practical Nursing, 1960*,¹ led to a number of recommendations by the NLN committee that guided the project. One of the most important recommendations was that "NLN take leadership in developing evaluation criteria for programs of practical nursing which are essential to the operation of a good program." Other recommendations were directed toward practical nursing programs. These suggested that the schools review their library resources critically, study the age distribution of their students in terms of dropouts and achievement of graduates on the state board examinations, and study the educational preparation and achievement abilities of entering students in order to utilize such data for the general improvement of their programs.

It seemed timely for the NLN to undertake a second questionnaire study of practical nursing programs in 1965. In the interim since the first survey was made, a number of things had happened that produced an impact on practical nursing education.

First of all, the report of the first study and the implications of the data collected had caused practical nursing educators to begin to take an inward look at their programs and to institute some needed changes. This movement toward improvement was intensified by an expansion of practical nursing activities within NLN, as preparation was being made to fulfill the request of members that accreditation services be offered to schools of practical nursing. During this same period, the rapid growth of practical nursing programs was further accelerated by federal legislation that made available increased public funds for vocational education, as well as vast amounts of money for the training of the unemployed.

At the time of the 1960 survey, there were in existence 662 state-approved educational programs in practical nursing in the United States and its territories. By 1965, the number had grown to 913. This phenomenal growth in numbers of programs resulted in part from the increased monies available for meeting the costs of practical nursing education. However, it also reflected the growing demand for greater numbers of licensed practical nurses and the attempts of educators in this field to meet the demand.

Changes in medical practices and care of the sick, as well as the population explosion, have resulted in an

increased need for nursing service personnel. This fact, combined with the great increase in public funds for the health occupations and the resulting growth of schools, has made it essential to take a critical look at practical nursing programs. NLN's objective of helping to meet the needs of the public for nursing service through improvement in nursing education places responsibility with this organization for such an analysis of nursing programs. This questionnaire study and the report of its findings is one way in which NLN is meeting its responsibility.

Influence of NLN's Practical Nursing Activities

At the time the first questionnaire survey of practical nursing programs was initiated, the Department of Practical Nursing Programs (DPNP) was not in existence. Its establishment in 1961 was followed by the formation of the council of member agencies in 1962 upon petition of the schools that had joined the department. The council, assisted by representatives of the state boards of nursing, state supervisors of practical nursing, and consultants from other nursing organizations, developed the criteria for the evaluation of practical nursing programs. This action, requested by the member schools, was in line with the recommendation resulting from the first study, that NLN take leadership in developing such criteria. The final draft of the council's work was approved by the steering committee of the DPNP in October of 1964 and published in early 1965.²

The statements in *Criteria for the Evaluation of Educational Programs in Practical Nursing* are standards of measurement to be used in appraising the characteristics and the quality of the programs. Formulated on the basis of the level of achievement that has been attained or is attainable by the programs, the criteria reflect acceptable standards rather than maximum goals. As described in the publication, they provide a tool to be used (1) by the schools for self-evaluation, (2) for the evaluation of practical nursing programs for which NLN accreditation is sought, and (3) for the appraisal of plans for the development of new programs.

This second survey of practical nursing programs was made too soon after the publication of the criteria for their full impact to be reflected in the findings. However, it was possible to use the major criteria in developing the questionnaire, and data in the report that follows have been analyzed in relation to the criteria used. It is possible, then, to make some evaluation of where programs are in terms of attainable criteria as well as

¹ Margaret D. West and Beatrice Crowther. *Education for Practical Nursing, 1960*. New York, National League for Nursing, 1962.

² *Criteria for the Evaluation of Educational Programs in Practical Nursing*. New York, National League for Nursing, 1965.

in terms of progress made since the previous study. For quick reference, each section of the report is prefaced by pertinent quotations from the *Criteria*.

Effects of Legislation

By the time this survey was under way, the nursing organizations were already concerned with the effects of the newest federal legislation making available funds for training in the health occupations. Of particular concern were the effects of those acts that were designed to deal directly with the combined problem of the large numbers of unemployed workers throughout the country and the large numbers of unfilled job openings. NLN's Department of Practical Nursing Programs had received reports that some of the projects for training practical nurses inaugurated under one such act had been set up according to standards below those established by ongoing programs in the same state. While there was, and is, great need for more personnel to assist in giving care to the sick, it is of deep concern to nursing that the quality of such care be maintained. This demands that professional nursing take an active role in the education of all persons who give nursing service or who assist registered nurses in giving such service. It should be noted here that not all service to the sick in hospitals is nursing service; there are a number of workers in the health occupations the responsibility for whom rests with members of other disciplines. The supervision and guidance of all workers who participate in *nursing* service, however, is the responsibility of the registered nurse. Nursing's concern, then, is that these workers be properly selected and adequately prepared for their roles in nursing service.

Both ANA and NLN, because of their long-continued and growing interest in practical nursing, have provided guidance in this field of nursing. Practical nursing educators have sought help from NLN in all aspects of planning, developing, and operating programs of practical nursing. Service personnel have looked to ANA and NLN for guidance on the functions of licensed practical nurses.

The Manpower Development and Training Act (MDTA) particularly affected practical nursing in that under it, federal funds were allocated for training programs for those unemployed who could not find full-time employment without such training. Among the MDTA projects begun in 1962 and carried through June of 1964 were 150 programs for training practical nurses, and about 5,200 students were enrolled in those programs alone. Full financial support for those projects was available from federal funds through the fiscal year 1965. During fiscal 1966, two-thirds of the funds are to come from the government and one-third from the institution providing the training. In fiscal 1967, one-half of the financial support will be from government funds and one-half from state funds — provided, of course, that Congress appropriates the monies.

The use of federal funds means administration by federal agencies. The MDTA is administered by two federal departments: the Department of Labor, because the training programs are primarily intended to relieve unemployment, and the Department of Health, Education, and Welfare (DHEW), because many of the programs are set up under vocational-technical education auspices and so come under the guidance of educational administration. The DHEW is responsible for agreements with state vocational education agencies concerning instruction in such programs, while the Department of Labor is responsible for the initial selection of trainees for available jobs, for granting payment of training period allowances, and for contracting with private employers to provide on-the-job training for certain categories of workers. Because of the great need for workers in the health field, training for the health occupations has become an important part of the entire project.

The Vocational Education Act (VEA) was signed in December, 1963, but funds were not available until August, 1964. Through this act, the federal government will provide financial assistance for an indefinite period of time to the regularly established vocational and technical education programs throughout the United States. With its emphasis on preparing students for employment in a wide variety and range of jobs — excluding only those determined by the U.S. Commissioner of Education to be professional or to require a baccalaureate or higher degree — this program is meant to foster flexibility in meeting changing occupational demands and opportunities. The temporary authorization of funds for practical nursing education under an act passed in 1956 was made permanent by the VEA.

Vocational-technical education programs may be conducted in any type of school or educational institution — comprehensive high schools, specialized vocational high schools, technical high schools, junior and community colleges, public and private four-year colleges, and universities. Although the VEA emphasizes the need for periodic evaluation of the goals and the progress of the schools in the light of community needs, nursing must fulfill its responsibility by being prepared to help in the evaluation and the guidance of those vocational-technical programs that prepare nurses or persons who act as assistants to nurses. Under the VEA, the states must now provide for: (1) training in health occupations as a unit separate from other vocational training, (2) a professional nurse to serve as state supervisor of the health occupations program, and (3) instructional administration and guidance through the U. S. Office of Education (USOE). The Division of Vocational-Technical Education of the USOE has a Health Occupations Unit headed by a professional nurse.

A national advisory committee was appointed in October, 1964, to assist the U. S. Commissioner of Education in administering the health occupations program. Of the five nurses appointed to the committee,

four were currently employed in administrative positions in the U. S. Public Health Service, the American Nurses' Association, the National League for Nursing, and the National Federation of Licensed Practical Nurses, respectively; the fifth was a nurse educator in a university. In addition to the five nurse members, the committee included representatives of vocational and general education, psychology, sociology, medical education, and hospital administration. An important consideration of the committee at its first meeting was the "further definition of the educational program which should prepare for nursing practice." The ANA was asked to redefine and delineate in detail the qualifications, the training, and the utilization of auxiliary workers in nursing service.

Analysis of the Data

One fact that emerged quite clearly from the data, even before final tabulation was begun, was that the different kinds of programs, the number of programs in public school systems, the several types of administration of programs, and curriculum experimentation would make accurate reporting of findings difficult. Tabulation of the responses gave evidence of the need for self-evaluation by schools of practical nursing, under a uniform guidance, similar to the self-evaluation carried out by the diploma schools of nursing preliminary to review for accreditation by NLN. The recently published criteria constitute a tool that could be used for such a program of self-evaluation and improvement.

Another problem in tabulating the data, which was indicative of the larger problems of practical nursing, lay in the greatly varied administrative patterns even within a given geographic area or a single state. The resultant individuality in replies, for instance, sometimes made it difficult to determine who was the director or coordinator of a program. Much of the confusion in answering this question must be attributed to the mis-

understanding by respondents that the words "director/coordinator" were meant to indicate a single title, rather than two titles, one or the other of which is commonly used for the individual who heads the faculty.

Some very small programs had only one faculty member who obviously had neither of these titles and who sometimes doubled as pharmacist, x-ray technician, or midwife. Most of the programs, however, irrespective of their placement, indicated that they had either a nurse coordinator or director, but occasionally, the person with this title was the principal or other non-nurse functionary, and guidance of the practical nursing program was only a small part of his or her work. In those instances where no such person was designated, the tabulators assumed that the person at the head of the list of faculty directed the program.

Because of the concern over the rapidity with which MDTA programs were being set up, a separate analysis of these programs was made. While a total of 150 programs were reported to be operating under MDTA funds by June of 1965, some of them may have been just getting under way when the questionnaires were mailed out. A total of 81 replies from programs using such funds were analyzed. Of this number, 61 were new programs established since the act went into effect, while 20 were older programs that were using MDTA funds to conduct an extra class or enrolling students financed through these funds in their regular programs. Some of the older programs that were enrolling such students reported the addition to their regular faculty of one or more persons employed under MDTA funds.

Only the 61 programs that were established since 1962 were analyzed separately. It was thought that the 20 older programs would probably show relatively little difference in their characteristics after having availed themselves of money under the act, while the newer programs might reveal some deviations in characteristics from the programs operating under other types of funding.

II. THE PRACTICAL NURSING PROGRAMS

At the close of the academic year 1963-64, there were 913 state-approved educational programs in practical nursing. The present study is based on data received from 722 of these programs.

The first program in practical nursing was opened in 1895 and is still in operation. In 1919, the first vocational high school program was opened. Considerable growth in the number of practical nursing programs took place in the 1940's and the number of programs has increased rapidly since that time. For the academic year 1959-60, the figure was 662; by 1963-64, it had risen to 913—an over-all increase of 251. As the number of programs increased during that five-year period, so did the numbers of admissions to and graduations from the programs. (See Table 1.) Admissions rose from 23,060 to 34,131—an increase of 11,071 students. The number of students graduated rose from 16,491 to 22,761—an increase of 6,270 students. The approximate attrition rates for the period were as follows: 1959-60, 28 percent; 1960-61, 33 percent; 1961-62, 32 percent; 1962-63, 36 percent; 1963-64, 33 percent.

TABLE 1. ADMISSIONS AND GRADUATIONS, ACADEMIC YEARS 1959-60 TO 1963-64

Academic Year	Number of Programs	Number of Admissions	Number of Graduations
1959-60	662	23,060	16,491
1960-61	693	24,955	16,635
1961-62	739	26,660	18,106
1962-63	851	30,585	19,621
1963-64	913	34,131	22,761

TABLE 2. DISTRIBUTION OF 721* PRACTICAL NURSING PROGRAMS BY ADMINISTRATIVE CONTROL, 1964-65

Administrative Control	Number of Programs	Percent of Programs
Vocational education		
Secondary school	55	7.6
Trade, technical, or vocational school	388	53.8
Junior or community college	86	11.9
University or senior college	12	1.7
Hospital or other agency		
Public hospital	31	4.3
Voluntary hospital	138	19.2
Other agency	11	1.5
Total	721	100.0

* One of the 722 respondents did not reply to this question.

The MDTA programs that were getting under way in 1962-63 without the same screening of applicants as was customary in the ongoing programs may account for the high rate of attrition in that year.

Administrative Control

The great majority of practical nursing programs are conducted under the auspices of public vocational education or are controlled by hospitals.

The distribution of the responding programs according to administrative control is shown in Table 2.

Three-fourths of the programs reporting are under vocational education auspices. Close to two-thirds of these are in trade, technical, or vocational schools. One-fourth of the programs are controlled by hospitals or other agencies. The majority of these programs are in voluntary hospitals. Many of the programs in junior or community colleges and some under the jurisdiction of universities or senior colleges operate under vocational funds. As of October 15, 1964, 48 secondary schools located in 11 states, the District of Columbia, and the Virgin Islands offered a program in practical nursing as a part of their curriculums.³ Table 3 shows the number of such programs by location, the grade at which they began, and their length.

TABLE 3. PRACTICAL NURSING PROGRAMS IN HIGH SCHOOLS, 1964

Location	Number of Programs	Grade in Which Program Began	Length of Programs in Months
Delaware	1	10	34
	1	11	32
District of Columbia	1	— ^a	— ^a
Florida	1	12	18
Maryland	1	10	30
Mississippi	1	12	13
Missouri	1	12	18
New Jersey	1	11	28
	3	12	16-18
New York	3	10	12-30
	17	11	
	1	12	
Ohio	1	12	18
Pennsylvania	2	12	17-18
Texas	1	12	17
Virginia	10	12	12-18
Virgin Islands	2	11	22-24

^a Permission to publish data in source, *State-Approved Schools of Practical and Vocational Nursing*, 1965, withheld.

³ National League for Nursing. *State-Approved Schools of Practical and Vocational Nursing*. New York, the League, 1965.

By October of 1965, the number of high school programs had increased to 66. Half of them are in the North Atlantic region, and close to a third are in the Southern region.

Size of Programs

The number of students enrolled in the programs in the study varied considerably, ranging from less than 10 in 49 schools to more than 100 in 29 schools. Data pertaining to enrollments are presented in Table 4, together with comparable figures taken from the 1960 survey.

Of the 722 programs in the present study, 316 reported enrollments of 10 to 29 students and 85 reported enrollments of 70 or more students. From the 1960 data, it can be seen that programs with enrollments of 70 or more students numbered only 64 at that time. On the other hand, the number of programs in the 1965 study that reported enrollments of less than 10 students is approximately two and one-half times the number of programs that reported to the same effect in the 1960 survey.

While no statements in the criteria pertain to actual numbers of students enrolled, the statement that faculty should number no less than two—a full-time professional nurse director/coordinator and at least one full-

TABLE 4. NUMBER OF PRACTICAL NURSING PROGRAMS BY SIZE OF STUDENT BODY

Number of Students	Programs			
	1965 Sample		1960 Sample	
	Number	Percent	Number	Percent
Less than 10	49	6.8	20	4.1
10-19	197	27.3	108	21.9
20-29	119	16.4	101	20.4
30-39	98	13.6	81	16.4
40-49	78	10.8	61	12.3
50-59	33	4.6	37	7.5
60-69	22	3.0	22	4.4
70-99	56	7.8	39	7.9
100 or more	29	4.0	25	5.1
No answer	41	5.7	—	—
Total	722	100.0	494	100.0

time professional nurse instructor — poses questions about the desirability of operating a program for less than 10 students. On the other hand, in programs with large enrollments, the faculty should be adequate in number to implement the program in accordance with the objectives and the clinical facilities should be sufficient to provide the essential learning experiences for each student.

III. PHILOSOPHY AND OBJECTIVES

"The philosophy and the objectives of the program have been carefully formulated, agreed upon, and well defined by the faculty" "... [they] must be in writing"

Of the 722 programs that returned questionnaires, 658 reported that they had formulated their philosophy and stated it in writing; 23, that they had developed their philosophy but had not put it in writing; and 16, that they had not formulated a philosophy. The remaining 25 programs answered ambiguously or did not reply to this query.

Replies about the objectives of the programs and who had developed them indicated that 638 programs had written objectives and 24 had oral objectives. Forty programs did not answer the question. To whom re-

sponsibility for developing objectives was delegated in the 662 programs with written or oral objectives is shown in Table 5.

No questions about philosophy and objectives were asked in the 1960 study. However, the number of programs in the present study that reported that their philosophy and objectives were in writing and that they had been formulated by the faculty or the faculty together with consultants indicates that the majority of programs are meeting the criterion on philosophy and objectives quoted at the beginning of this section.

TABLE 5. DELEGATION OF RESPONSIBILITY FOR THE DEVELOPMENT OF OBJECTIVES IN 662 PRACTICAL NURSING PROGRAMS, BY SIZE OF STUDENT BODY

Number of Students	Number of Programs With Written Objectives Developed by:							
	Total	Nurse Director/Coordinator	Non-nurse Director/Coordinator	Faculty	Faculty and Consultants	Staff Member of Controlling Institution	Other Person(s)	No Answer
Less than 10	45	16	—	6	12	—	7	3
10-19	192	51	1	51	54	7	16	12
20-29	118	27	—	50	34	2	1	4
30-39	96	13	—	47	25	1	4	6
40-49	77	8	—	43	20	—	3	3
50-59	31	4	—	19	6	—	1	1
60-69	22	4	—	8	7	1	—	2
70-99	55	7	—	25	16	—	3	4
100 or more	26	2	—	9	13	—	1	1
Total	662	132	1	258	188	11	36	36

IV. ORGANIZATION AND ADMINISTRATION

"The controlling institution, through the nurse director/coordinator, has responsibility for the total program from the time of recruitment and enrollment through graduation of the student."

Advisory Committee

Replies to the queries concerning an advisory committee indicated some uncertainty about the committee, its membership, and its functions. Although 609 programs indicated that such a committee existed and 90 did not, over 700 programs checked some of the functions of the committee listed in the questionnaire. Therefore, tabulation of the responses pertaining to functions was restricted to those made by the programs that reported the existence of an advisory committee. Some write-in replies indicated that such a committee existed but did not function, while a number of programs checked all of the functions listed. Table 6 shows the functions checked by the 609 programs that reported the existence of a committee and the number of programs that checked each function. More than a third of the programs indicated that the committee selected students; about a quarter, that it recommended personnel policies for faculty; and more than a fifth, that it negotiated contractual arrangements with cooperating agencies.

The guidelines accompanying the pertinent criterion suggest that an advisory committee may be one means of keeping the program sensitive and responsive to the needs of the community but that its functions should be such that it is recognized as an advisory and not a policy-making group. It would appear that in some of the programs, certain of the functions performed by the advisory committee exceed those that are properly delegated to an advisory group.

Budget

The great majority of programs — regardless of the type of financing and administrative control — placed responsibility for determining the budget in the hands of the director/coordinator of the program or the administrative officer of the controlling institution or both. A small number relied on other combinations of administrative personnel or on boards of trustees, boards of education, or other boards. (See Table 7.)

The data also revealed that the majority of the respondents, or 520 programs, had a separate budget for the nursing program.

The findings show that half of the programs studied are in conformance with the criterion pertaining to the budget, the guidelines on which state that the nurse director/coordinator of the program should participate in the preparation of the budget. The provision of a separate budget for the nursing program is a first step

toward assuring adequate and stable financing of the program in accordance with the needs as determined by nurse faculty members.

The data pertaining to approval of the budget showed a different pattern in that the administrative officer of the controlling institution or the board of education or trustees or other combinations of administrative personnel bore that responsibility in the majority of programs responding to the question. This difference was, of course, expected and in no way reflects divergence from NLN standards for accreditation.

Contracts with Cooperating Agencies

Written contracts or agreements were made with other institutions that provided learning and practice experiences for students in 521 programs. Of those, 334 indicated that they required one-year contracts; 134, that their contracts were for an indefinite period; and 28, that the duration of their contracts varied with the institutions used. The remaining 25 did not answer the question concerning the length of the contract.

Four hundred and forty programs reported that the learning experiences to be provided were stated in all of their contracts with institutions that served as cooperating agencies. In 368 programs — more than half of the number responding — the responsibility for supervision and teaching of students was fixed with faculty employed by the controlling institution, and in 203, it was shared by such faculty with others. In 114 programs, this responsibility was fixed with faculty employed by the primary hospital or cooperating agency.

It is stated in the criteria that there should be written agreements between the controlling institution and each

TABLE 6. FUNCTIONS OF ADVISORY COMMITTEES REPORTED BY 609 PROGRAMS

Function	Number of Programs Reporting Function
Act in public relations capacity	542
Inform about employment and training needs in community	453
Recruit students	347
Select students	225
Provide financial aid to needy students	168
Recommend personnel policies for the faculty	157
Negotiate contractual arrangements with affiliated agencies	114

TABLE 7. DELEGATION OF RESPONSIBILITY FOR DETERMINING THE BUDGET IN 704 PROGRAMS, BY TYPE OF FINANCING AND ADMINISTRATIVE CONTROL

Type of Financing and Administrative Control	Number of Programs in Which Responsibility is Delegated to:					
	Total	Director/-Coordinator	Administrative Officer of Controlling Institution	Director/Coordinator & Administrative Officer	Board of Education or Trustees	Other Combinations of Administrative Personnel
Financing						
Public	572	178	196	105	15	78
Private	132	42	35	37	3	15
Total	704	220	231	142	18	93
Administrative Control						
Secondary school	55	14	16	10	4	11
Technical, trade, or vocational school	379	112	131	74	11	51
University or senior college	11	3	1	5	—	2
Community or junior college	86	35	30	11	—	10
Government (federal, state, city) hospital	30	10	12	4	—	4
Other hospital	131	40	40	36	3	12
Independent agency	8	4	—	2	—	2
Government agency	3	1	1	—	—	1
Other	—	1	—	—	—	—
Total	704	220	231	142	18	93

agency participating in the program and that these contracts should be reviewed annually. Of the 722 programs in the study, all but 201 indicated that such written contracts or agreements were in effect. In this connection, it should be remembered that some of the programs under hospital administration use only the hospital in which the program is placed and not all of them see the necessity for a contract between the school and the service agency. In further conformity with this criterion were the 440 programs that required statements in their contracts concerning the learning experiences to be provided by the cooperating agencies.

Most significant of change was the finding revealed by analysis of the responses to the question concerning the placement of responsibility for supervision and teaching of students in the cooperating agencies. For a great many years, this responsibility was delegated to the cooperating agencies. That this responsibility is fixed with faculty employed by the controlling institution in over half of the programs is a step forward in meeting the criterion that such control must be assured in written agreements. In only about 15 percent of the programs was this responsibility entirely delegated to the cooperating agency.

V. CURRICULUM

"The curriculum is designed to meet the stated objectives." "[It] provides for a correlated program of clinical instruction and practice . . ." "There is concurrent, meaningful application of theory to practice." "The sequence of learning is from the simple to the complex . . ." "In selecting learning experiences in the clinical situation, the focus is on the students' needs . . ."

The diversity of programs made questions about curriculum difficult to answer and almost impossible to tabulate. With programs varying from nine months to three years in length, the numbers of hours or weeks in any given subject were, of course, equally diversified.

Many respondents appended notes to the questionnaire explaining why they could not complete the section on curriculum. Many indicated that they were integrating clinical experience with specific subject areas and were unable to give the numbers of hours per subject. Others stated that they could not answer more explicitly because they were integrating experience on the basis of individual student's needs. Some respondents sent copies of their curriculums; others sent copies of the state's requirements regarding curriculum and noted that they were meeting them. A few commented that the curriculum questions in the questionnaire were not applicable to programs financed by MDTA funds, and some programs financed by such funds reported having separate adult classes within vocational schools. Also, in some instances, programs within a given public school system were of different lengths.

Length

The great majority of the programs throughout the country are approximately 52 weeks in length, usually with 2 weeks of vacation included. According to the 1965 edition of *State-Approved Schools of Practical and Vocational Nursing*,⁴ of a total of 900 programs (arrived at by excluding from the total of 913 operating programs the 48 high school programs and including the 35 programs for adults that closed in 1964), 713 were 12 months long, 41 were less than 12 months long, and 76 were more than 12 months long. (Of the remaining 70 programs, 30 had given no specific answer and 40 had not returned the survey questionnaire.)

Of the 76 programs that were longer than one year, 31 were in Massachusetts, where the length is fixed by law at no less than 15 months, and 9 were in Tennessee, where all programs are 13 months long. The remaining 36 varied in length and were located by NLN region as follows: 3 in the North Atlantic region, 4 in the Midwestern region, 8 in the Southern region, and 21 in the Western region. Some were in community or junior colleges and so were planned on a semester basis with vacation time between semesters. Others were programs in which the academic portion might be spread over 8 or 9 months on a part-time basis, with the clinical

portion following on a full-time basis, which might make the program 15 or more months in length. The content covered in most of these programs, however, corresponds to that in the one-year curriculum.

Of the 41 programs that were less than 12 months long, 35 were 11 months in length, 5 were 10 months, and 1 was 9 months. There were 21 such programs in one eastern state; the rest were located in another 8 states. More than half of these shorter programs were operated under MDTA funds.

As has been shown earlier in this report, programs set up within the curriculum of secondary schools may be spread over two or three years, the curriculum including both practical nursing subjects and academic courses required for graduation from high school.

Curriculum Content

Hand tabulation of the responses to queries regarding curriculum showed that content in the areas of the curriculum listed in the questionnaire was being taught in all of the programs, although different course titles were used. No pattern of hours could be discerned because of the variation in titles and in the respondents' placement of course content in the several areas of the curriculum. Thus, content in fundamentals of nursing, medical-surgical nursing, nursing of children, nursing of mothers and newborn, and the biological and physical sciences was being taught in all of the programs. With respect to nutrition, hand tabulation revealed that preparation of diets was being taught in 132 of the responding programs (using hours in the diet kitchen as the criterion). The number of hours spent in the diet kitchen ranged from 5 to 112 for the entire course, with the majority of programs specifying 80 hours.

Home housekeeping as such was taught in 1 program; 6 others listed "hospital housekeeping" or "housekeeping and family relationships." Only 3 programs listed "home nursing" as a subject being taught, but 21 programs listed "family" or "family living," and 25 programs reported that "life span" was the subject in which family life was presented in some way.

A number of programs reported that they were using conferences on patient care as a method of following up lectures in nursing subjects and could not compute hours for a given subject. The variation in replies and the inability of the respondents to fit subject matter into the precise format of the questionnaire suggest that curriculum content in a number of the programs is becoming less precise in terms of actual hours of isolated courses. Statements written in by some of the respond-

⁴ National League for Nursing. *State-Approved Schools of Practical and Vocational Nursing*. New York, the League, 1965.

ents confirm this inference. In some programs, courses were categorized only with respect to progression, such as Nursing I, Nursing II, or Nursing III. The responses indicate that many faculties are giving serious thought to what methods of teaching are best, what content should be in a practical nursing program, and what the framework of such a program should be in order to fulfill the objectives of the curriculum.

According to the curriculum patterns indicated by the responses, the programs that completed this section of the questionnaire might be grouped as follows:

1. Those with a three- to five-month period of pre-clinical courses in such basic areas as fundamentals of nursing, nutrition, biological and physical sciences, and social foundations, followed by a period of theory and practice in the clinical areas.
2. Those in which all basic and clinical courses were given concurrently.
3. Those in which all major courses were given prior to clinical experience.
4. Those with a three- to five-month period of pre-clinical courses but with a few basic courses continued throughout the program.
5. Those with no clearly defined curriculum pattern.

According to the responses, in only 11 programs were all major courses taught before learning experiences in the clinical setting were provided. (Tables 8 and 9.) For the reasons mentioned at the beginning of this section, it was not possible to determine the number of programs in which theory and clinical experience were completely integrated and the number in which the two were partially integrated. Filling out the questionnaire was not difficult for the programs in which all theory preceded clinical experience, but it was apparently very difficult for many of those in which theory and practice were concurrent or partially so to show the correlation in the format provided. However, it is evident from the findings that great strides have been made in the correlation of subject matter and clinical experience. Such changes are in accord with the criterion requiring that the curriculum provide for a correlated program of clinical instruction and practice.

All of the respondents indicated that they were giving both classroom work and clinical experience in three major areas: medical-surgical nursing, nursing of children, and nursing of mothers and newborn. Many programs did not answer questions about classes and/or experience in psychiatric nursing. Some programs indicated that basic human relationships were stressed throughout the course. Others reported that the subject was covered by lectures and field trips. Of those programs that responded to the questions on psychiatric nursing, 217 gave classroom work and some type of experience and 130 gave classroom work only. None provided for clinical experience in that area prior to classroom work. The number of hours in psychiatric nursing ranged from less than 10 in 13 programs to

455 in 1 program that had a special project under a mental health grant.

Of the 217 programs reporting that psychiatric nursing experience was included in the curriculum, 91 gave instruction and clinical experience concurrently, 13 gave instruction before experience, 27 gave some theory before experience and the rest concurrently, and 53 reported that both theory and clinical practice were integrated with other theory and clinical practice. The remaining 33 did not indicate how the experience was obtained.

The inclusion of psychiatric nursing experience in 217 programs is in marked contrast with the picture presented in the 1960 survey, which showed that only 15 percent of the programs provided such experience. The addition of the 130 programs that gave psychiatric nursing theory without clinical practice brings the total number that included this subject in their curriculums to 347, or almost half of the programs in the present study. The indications are, then, that programs are making an effort to meet the criterion that, as interpreted by the accompanying guideline, in part requires that students be provided with experiences in the nursing care of individuals with mental and emotional problems. The guideline was so stated because it was recognized that not all programs had access to institutions for the care of the mentally ill but that those that did not could provide selected experiences in the care of the emotionally disturbed in other types of facilities.

Evening and Night Experiences

The programs in the study showed great diversity with respect to the provision of learning experiences on the evening and night tours of duty. Of the 721 programs that responded to this question, 345 scheduled no experiences during these hours. One hundred and forty-seven programs provided no more than 2 weeks of such experiences, the time pattern being either 1 week of experiences on each tour or, more commonly, 2 weeks of evening experiences only. Another group of 110 programs included no more than 4 weeks of evening and night experiences, the common pattern being 2 weeks of each. The remaining 119 programs had longer periods of one and/or the other and were located in 17 states, with the majority concentrated in only 7 states. It was interesting to note that in 1 state with a large number of programs, periods of evening and night experiences ranged from none at all to as many as 22 weeks. The greater number of these were under hospital administration.

It should be noted that a few programs, most of which have been established with MDTA funds, are afternoon programs entirely, with students in school from approximately 3 P.M. until 9 P.M. Many of these programs reported all of the 24 weeks or more of clinical experiences as afternoon experiences. One such program reported the entire curriculum as 48 weeks of afternoon experiences.

TABLE 8. DISTRIBUTION OF 611 PROGRAMS BY CURRICULUM PATTERN AND ADMINISTRATIVE CONTROL

Curriculum Pattern	Number of Programs by Administrative Control								
	Total	Secondary School	Trade, Technical, or Vocational Education	University or Senior College	Community or Junior College	Government Hospital	Other Hospital	Independent Agency	Government Agency Other than Hospital
Preclinical period 3-5 months	172	11	102	2	21	5	29	2	—
All basic and clinical courses concurrent	108	10	54	1	13	8	20	2	—
All major courses before clinical experience	11	—	6	—	1	—	3	—	1
Preclinical period 3-5 months but a few basic courses continuing throughout	286	19	150	7	33	10	62	3	2
No clearly defined pattern	34	10	15	1	4	3	1	—	—
Total	611	50	327	11	72	26	115	7	3

TABLE 9. DISTRIBUTION OF 582 PROGRAMS BY CURRICULUM PATTERN AND SIZE OF STUDENT BODY

Curriculum Pattern	Number of Programs by Size of Student Body									
	Total	Less than 10 Students	10-19 Students	20-29 Students	30-39 Students	40-49 Students	50-59 Students	60-69 Students	70-99 Students	100 or More
Preclinical period 3-5 months	162	11	42	26	21	26	7	5	13	11
All basic and clinical courses concurrent	105	5	33	27	11	7	6	3	9	4
All major courses before clinical experience	11	1	4	1	1	2	—	—	2	—
Preclinical period 3-5 months but a few basic courses continuing throughout	272	11	78	48	45	28	17	9	27	9
No clearly defined pattern	32	1	10	2	7	5	1	3	2	1
Total	582	29	167	104	85	68	31	20	53	25

VI. FACULTY

"The faculty consists of the director/coordinator and the instructors who teach in the classroom and the clinical areas, all of whom are employed by and responsible to the controlling institution. The faculty is qualified and adequate in number to develop and implement the program in accordance with the stated objectives." "There should be regular and planned faculty meetings. . . ." "Written personnel policies for faculty are on file" "Written job descriptions for all faculty should be on file"

The programs varied in number of faculty members from those with one person serving as administrator, supervisor, instructor, and charge nurse of the clinical agency to those in large vocational education systems with as many as some 50 instructors. The total number of faculty reported by the 722 programs was 3,993. Of these, 3,364 were nurse faculty and 629 were non-nurse faculty. The breakdown with respect to employment status was as follows.

<i>Agency</i>	<i>Number of Programs</i>
Vocational or other public education system	458
Hospital	132
School and hospital	50
Other	19
No reply	63

	<i>Nurse Faculty</i>	<i>Non-Nurse Faculty</i>
Full-time:	2,578	112
Part-time:	786	517

As was mentioned early in this report, the responses showed much misunderstanding of the term *director/coordinator*, many respondents having stated that there was no such title. In tabulating the data pertaining to director/coordinators, it was assumed in instances of that nature that the person heading the list of faculty was the director or coordinator.

Of the 722 programs, 656 indicated that the position of director/coordinator was held by a nurse, 32 that the position was held by a non-nurse, and 34 did not respond to the query. In responses to the question of whether the director was employed full time or part time, 606 programs reported full time, 30 part time, and the remaining 86 did not reply. The distribution by type of administrative control of the 30 programs with part-time director/coordinators was as follows.

<i>Administrative Control</i>	<i>Number of Programs</i>
Secondary education	2
Trade, technical, or vocational education	7
Junior or community college	6
Government hospital	2
Nonprofit or proprietary hospital	13

Following is a summary of the responses to the question of what agency paid the salary of the director/coordinator of the program.

The responses pertaining to the educational preparation of the director were as follows:

<i>Highest Earned Credential</i>	<i>Number of Directors</i>
Doctoral degree	3
Masters degree	194
Baccalaureate degree	300
Associate degree	2
Certificate	2
None	211
No reply	10

Of the 211 directors without a degree, 120 were working toward one. A little more than half of the group had already earned from 1 to 44 credits, and the remainder had earned from 45 to 105 and over.

Of all faculty members, 19 held doctoral degrees, 424 held masters degrees, 1,522 held baccalaureate degrees, 14 held associate degrees, and 722 were working toward attaining their first degree.

Analysis of the above data reveals that 69.8 percent of the 722 directors held degrees but only 49.5 percent of all faculty (3,993) held degrees.

Although the programs were asked to cite the experience of all faculty, only the responses pertaining to the director/coordinator were tabulated. These data are presented in Table 10.

In view of the fact that 255 programs did not reply to the question concerning prior experience of the director/coordinator and an additional 52 reported that such experience totaled less than one year, it would seem that almost 45 percent of the directors were relatively inexperienced in the teaching of nursing. However, judging by the number of directors who are working toward attaining their first degree and the

TABLE 10. EXPERIENTIAL BACKGROUND OF DIRECTOR/COORDINATORS OF 722 PROGRAMS

Experience	Number of Directors by Years of Experience								Total
	1 or Less	1+ to 2	2+ to 3	3+ to 4	4+ to 5	5+ to 10	Over 10	No Reply	
Teaching in nursing									
On present faculty	89	118	82	50	49	173	94	66	722
Prior to present position	52	58	59	46	42	110	100	255	722
Other experience in nursing	17	36	43	34	32	143	298	119	722

number of requests for materials on curriculum addressed to NLN, it would appear that those in this group are not static in their approach and are striving to improve their effectiveness.

The programs were asked whether or not there were written job descriptions for all faculty positions and written personnel policies for faculty and if so, whether or not copies were given to potential members when applying and to members when employed and whether or not members were represented in formulating or revising the job descriptions and the policies. Table 11 summarizes the affirmative responses to these queries.

A good many programs without written job descriptions and/or personnel policies for faculty noted in explanation that the documents were in the process of revision, or that they were then being written for the first time, or that a committee had recently been formed to write them. All of these respondents also stated that the faculty was participating in the revision or formulation of the particular document. A number of programs noted that faculty were state employees and that personnel policies for them were the same as for all employees of the state.

Programs with written job descriptions were asked to indicate whether qualifications for the positions, over-all description of the work, specific areas of responsibility, title or position of person to whom responsible, and title or position of person(s) for whom responsible were stated in the descriptions. Programs with written personnel policies for faculty were asked to indicate whether the document included statements of the qualifications for positions, the salary scale, promotion policies, vacations, sick time, leave of absence for study, retirement plans, and health services and/or insurance. The affirmative responses to both queries are summarized in Table 12.

According to the responses, 68 percent of the study programs had written job descriptions and 79.5 percent had written personnel policies for faculty. In well over half of the programs, the personnel policies incorporated all but one of the subjects specified in the questionnaire. Hence, it can be said that the majority of programs are largely meeting the criterion regarding personnel policies for faculty.

TABLE 11. SUMMARY OF AFFIRMATIVE RESPONSES REGARDING WRITTEN JOB DESCRIPTIONS AND PERSONNEL POLICIES

Item	Number of Affirmative Responses Re:	
	Job Descriptions	Personnel Policies
Available	491	574
Given to potential members	277	281
Given to new members	420	500
Faculty represented in formulation	383	372

TABLE 12. SUMMARY OF AFFIRMATIVE RESPONSES REGARDING STATEMENTS INCLUDED IN WRITTEN JOB DESCRIPTIONS AND PERSONNEL POLICIES

Subject of Statement	Number of Affirmative Responses
Job Descriptions	
Qualifications for positions	452
Over-all description of work	462
Areas of responsibility	434
Title of person to whom responsible	439
Title of person(s) for whom responsible	383
Personnel Policies	
Qualifications for positions	487
Salary scale	458
Promotion policies	351
Vacations	545
Sick time	521
Leave for study	384
Retirement plans	441
Health services and/or insurance	436

Periodic meetings of the nursing faculty were held in 640 programs. Of the remaining 82 programs, 33 reported that faculty meetings were not held periodically, and 49 did not reply to the question. In 118 of the 640 programs, the meetings were held once a week; in 66, more often than once a month; in 204, once a

month; in 13, between once a month and once a year; and in 226, at no specific intervals or with indefinite frequency. The remaining 13 programs did not specify the frequency of meetings. A number of respondents added notes regarding irregularly scheduled meetings from which it appeared that they believed informal and casual meetings to be conducive to exchange of information.

Information written in was always of interest and usually revealed a desire to answer the particular query correctly or to clarify the situation when the query did not apply to the specific school. Some of the notes were plaintive, and some plainly revealed faculty working conscientiously against great odds — as in the case of a lone director-instructor in a very small school who

added that she also took x-rays in emergencies and helped to deliver babies. And only in hand tabulation could one see that a formidable listing of faculty with masters degrees often included a clergyman, a pharmacist who taught sciences because no one else on the faculty was qualified, or a football coach who taught first aid.

Most of the doctorates held by faculty were medical degrees, and almost all of those holding them were listed as full-time faculty — again in small schools. Those faculties with the best-qualified teachers were either in city vocational education systems or in junior or senior colleges. California, Illinois, and New York had the greatest proportion of faculty with degrees, particularly nurse faculty with masters degrees.

VII. STUDENTS

"Selection of students is based upon an analysis of the abilities needed to successfully complete the program of study and to enter the vocation of practical nursing. Each applicant is evaluated in terms of total preadmission requirements, and selection is made in accordance with standards established by the faculty of the nursing program. There are personnel policies in effect for students that provide for their safety, welfare, and guidance . . ."

Analysis of the replies to certain questions about students showed that for every 100 inquiries about admission received by the programs, there were approximately 50 applications for admission, 17 acceptances, and 16 admissions. What might be called self-screening made for the difference between the number of inquiries and the number of applications, and, of course, the screening processes of the programs accounted for the difference between the number of applicants and the number of those accepted for admission. The findings upon which the foregoing ratio was based were as follows.

1. 179,211 inquiries were received by 665 programs.
2. 81,042 applications for admission were received by 669 programs.
3. 30,117 applicants were accepted of the 39,050 applicants who qualified for admission on the basis of screening processes in 663 programs.
4. 28,333 students were admitted to 698 programs.

As is shown by the findings listed below, the means of judging the capability of applicants were much the same in all programs.

Number of Programs Utilizing Means

<i>Means</i>	<i>Number of Programs Utilizing Means</i>
Previous school record	671
Pre-entrance qualifying examinations	682
Personal and/or work references	650
Physical examination	703
Personal interview	700

The programs that required students to take pre-entrance examinations to qualify for admission were asked to specify what tests were used. The replies of the 580 programs that answered the question are shown in Table 13.

Requirements regarding age of students upon admission varied from program to program, the bulk of them requiring that entering students be at least 17 years of age. A small number of programs admitted 16-year-olds, and a few had no age requirements. Among those with requirements, the maximum age at which students were accepted was 65, and a fairly large number of programs limited the top of the age range to 55.

TABLE 13. DISTRIBUTION OF PROGRAMS REQUIRING PREADMISSION EXAMINATIONS BY ADMINISTRATIVE CONTROL AND TEST USED

Administrative Control	Number of Programs by Test Used						
	GATB*	PACE†	Otis‡	Psych. Corp.§	GATB & Otis	PACE & Others	Other(s) and Combinations
Secondary school	17	7	—	2	2	7	13
Trade, technical, or vocational education	122	14	17	9	44	32	135
University or senior college	1	1	—	—	1	2	5
Junior or community college	11	1	5	—	9	2	56
Government hospital	2	5	2	7	—	2	9
Other hospital	10	20	7	12	2	21	55
Other independent agency	—	1	—	2	—	2	2
Government agency other than hospital	1	1	—	1	—	—	—
Total	164	50	31	33	58	68	176

* General Aptitude Test Battery

† NLN Preadmission and Classification Examination

‡ Otis Quick-Scoring Mental Ability Test

§ Psychological Corporation Entrance Examination for Schools of Practical Nursing

According to data collected by NLN (Table 14), 35 percent of all students entering practical nursing programs in 1960-61 were less than 20 years old, 25 percent were between 20 and 34 years old, and 40 percent were 35 and over. By 1963-64, the age pattern had changed considerably. Students under 20 years of age still constituted 35 percent of the total number, but the proportion of students between 20 and 34 had risen to 36 percent and that of students 35 and over had shrunk to 29 percent. Thus, during the three-year period, the ratio of students under 35 to those 35 and over had changed from 60:40 to 71:29. This substantial increase in the proportion of students in the lower age groups can be expected to lengthen the average period of employment of the graduates.

TABLE 14. AGE DISTRIBUTION OF STUDENTS, 1960-61 AND 1963-64

Academic Year	15-19	20-24	25-34	35-44	45 and over
1960-61	8,635	4,027	4,076	4,474	3,139
1963-64	11,764	6,276	5,688	5,917	3,531

Data collected by Research and Studies Service of NLN.

The educational level of students entering practical nursing programs has been rising steadily over the past several years (see Table 15). In 1959-60, the proportion of high school graduates was 61.4 percent. During the next five years, the figure rose as follows: 1960-61, 69.4 percent; 1961-62, 71.3 percent; 1962-63, 72.9 percent; 1963-64, 74.7 percent; 1964-65, 75 percent.

The programs were asked to state the total cost to one student for the entire program and to specify the amount of certain costs. Although 676 of the 722 programs responded to the query, the replies were so varied and were so often qualified by explanatory notes that meaningful comparisons of the programs in respect to costs cannot be made. State laws about fees for vocational education programs obviously vary greatly. Programs under vocational education auspices in some states were free to all students. Such programs in other states made charges to adult students only. Again, some programs made no charges to residents or made smaller charges to residents than to nonresidents. Some pro-

grams used community health resources for required health examinations, chest x-rays, immunizations, et cetera, while others expected the students to meet these expenses. Thus, in view of the disparity of the responses, little purpose would be served in reporting more than ranges of costs.

The highest charge for tuition reported was \$900 for nonresidents, seemingly with no charge for residents. In one program, the cost of tuition was \$339 for residents and \$839 for nonresidents. The median tuition cost was \$50.

Fees for testing, application, admission, required health examinations, required hospital and medical care, and other items ranged from none to a total of more than \$200. Fifty-three programs made no charge for these items, 144 charged from \$51 to \$75, and 155 charged from \$76 to \$100.

Relatively few programs offered room and board, since the large majority of the programs are under public vocational education auspices and students in those programs usually live at home or make their own living arrangements. Among the programs that did offer room and board, the charges ranged from as low as \$5 for room alone to a high of \$600, and from a low of \$15 for board alone to a high of \$800. The lowest combined fee for room and board was \$35 and the highest was \$1,385.

The findings pertaining to financial assistance given to students (members of the last class completing the program) were of much interest. The numbers of students who availed themselves of scholarships, loans, stipends, MDTA allowances, and other kinds of assistance (see Table 16) indicate that financial need is a small deterrent to students' entering programs.

The fact that 5,492 students, or 15 percent of all students admitted to the 722 programs, received hospital stipends suggests that some hospitals continue to look on a practical nursing program as a source of inexpensive help. However, the finding that such stipends were paid to students in only 266 programs, or a fraction more than 36 percent of the 722 in the study, is in marked contrast to the 1960 survey finding that stipends were paid to students in 68 percent of the programs studied. The outmoding of this practice enables better selection of student learning experiences and better

TABLE 15. NUMBER OF STUDENTS ADMITTED TO PRACTICAL NURSING PROGRAMS BY PREVIOUS EDUCATION, 1959-60 — 1964-65

Educational Level	Number of Admissions					
	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65
High school graduates	14,163	17,389	19,009	22,295	25,515	27,475
Not high school graduates	7,392	7,108	6,268	7,000	7,540	7,918
Not specified	1,505	458	1,383	1,290	1,076	1,096
Total	23,060	24,955	26,660	30,585	34,131	36,489

Data collected by Research and Studies Service of NLN.

TABLE 16. NUMBER OF STUDENTS GIVEN FINANCIAL ASSISTANCE IN 722 PROGRAMS BY TYPE OF ASSISTANCE AND ADMINISTRATIVE CONTROL OF PROGRAM

Type of Assistance	Number of Students by Administrative Control of Program								
	Total	Secondary School	Trade, Technical, or Vocational Education	University or Senior College	Community or Junior College	Government Hospital	Other Hospital	Other Independent Agency	Government Agency
Loan	370	4	191	20	56	9	65	25	—
Scholarship	461	3	287	4	75	4	82	6	—
Hospital stipend	5,492	461	2,952	104	494	237	1,189	55	—
MDTA allowance	1,376	184	978	—	187	13	14	—	—
Other stipend or subsistence	288	9	128	7	27	4	58	44	11
Salary*	272	—	56	—	20	37	139	—	20
Other†	344	44	230	24	3	7	16	20	—

* Salary continued by former employer while student attends program.
 † Usually travel.

correlation of theory and practice by the faculty and so privileges the student to pursue a truly educational program rather than one that is service-centered.

Policies relative to student health were fairly consistent among the programs. Of the 722 in the study, 704 reported that they had such policies, 8 that they did not, and 9 failed to answer the query. Of those responding in the affirmative, 629 had written policies. In 696 programs, pre-entrance requirements included a physical examination; in 682, a chest x-ray; and in 664, immunizations.

It hardly seems possible that in a program wherein students work with sick patients, a physical examination and a chest x-ray would not be required of all students. Yet, 8 programs had no policies on student health, and of the 704 that did, 8 did not require a physical examination and 22 did not require a chest x-ray. Aside from the hazards to patients in the absence of those requirements, it would seem that to a program in which positive health is taught, the health of the individual student would be of sufficient concern to make the requirements mandatory.

VIII. FACILITIES AND RESOURCES

"The physical and clinical facilities and other resources are adequate in quantity and quality to the needs of the program."

Some matters pertaining to facilities and resources have been covered in earlier sections of this report.

The average daily census of patients in primary and other hospitals used by programs for clinical experience ranged from less than 25 patients to more than 500. Some programs, especially those under vocational education auspices, used several hospitals and other kinds of agencies for clinical experience.

The physical facilities available in cooperating agencies and the contractual arrangements made for the use of facilities are of importance in planning and developing programs. According to the criteria, the clinical facilities should be sufficient in number and type to provide the essential experiences for all students, and the numbers and types of patients in the cooperating agencies should be sufficient to provide comparable learning experiences for each student. In addition, the cooperating agencies should provide adequate classrooms and other necessary facilities. Responses to the question of whether or not the facilities to be used were specified in written contracts or agreements are shown in Table 17.

TABLE 17. CONTRACTUAL ARRANGEMENTS REGARDING USE OF FACILITIES IN COOPERATING AGENCIES

Item	Number of Programs		
	Including Item in All Contracts	Including Item in Some Contracts	Not Including Item in Contracts
Patient Units	448	20	44
Classrooms	334	37	110
Conference Rooms	311	39	132
Faculty Offices	243	50	183

A significant finding was that 145 programs, or 20 percent of those in the study, used nursing homes for part of the students' learning experiences. A Michigan study indicated that the use of those agencies would be instrumental in increasing the number of LPN's seeking employment in them inasmuch as the majority of the graduates of the practical nursing programs studied were employed in the institutions where they received part of their training.⁵ Since the need for better-qualified

⁵*Facts About Practical Nursing Education in Michigan*. Condensed by Ralph W. Tyler from the full report compiled by Mary Schmitt. Lansing, Michigan, Department of Public Instruction, 1957, p. 14.

personnel in nursing homes is so great, it is encouraging to note that an increasing number of programs are using these facilities. In the 1960 study, only 2 percent of the programs studied included experiences in nursing homes.

Library Resources

In response to the question of whether or not there was a practical nursing program library collection, 685 programs reported that there was and 20 that there was not; the remaining 17 programs did not reply to the query. Thus, even if it is assumed that the 17 that did not respond lacked collections, only 5.1 percent of the sample are not meeting the need for this resource. Of the 685 programs with collections, 353 had separate libraries, 126 utilized combined libraries of one kind or another, 182 had other housing arrangements, and 24 did not specify where their holdings were housed. Many of the programs without separate or combined libraries stated that practical nursing books had been placed in the nursing stations on all wards in the hospital or that the nursing arts classroom doubled as a library, and some reported that the books were kept in a locked cabinet in a faculty office.

Regarding budget provisions for acquisitions, 452 programs indicated that the library needs were provided for in the budget for the school or program; 40, that the needs were not so provided for; and 194, that there was no separate library budget for the school. Many programs within vocational education systems indicated that although they had no separate library budget, their requests for books were met. A total of 585 programs reported that a centralized collection of suitable audio-visual teaching materials was available for use by the faculty, and 291 reported that there was a separate item in the budget for the purchase or rental of such aids. Table 18 shows a breakdown of the foregoing findings according to the type of administrative control of the programs.

Although 685 programs reported the existence of a practical nursing library collection, not all of them responded to the query regarding the number of different titles in the collection. Those that did report numbered 588, and their responses varied widely within a range of 1 to 999 or more titles. For example, 1 program had but 1 title, another had 3, still another had 4, a few had from 5 to 10, and so on throughout the range, with relatively small intervals between the numbers of titles reported. Hand tabulation showed

that 60 programs, or 10.2 percent of the 588, had collections consisting of 1 to 25 different titles and that at the other end of the range, 15 programs, or 2.5 percent, had collections of 999 or more. Hand tabulation also showed that 50.5 percent of the 588 had 125 or more titles, 38 percent had 175 or more, and 35.5 percent had 200 or more. Comparison with the findings of the 1960 survey indicates that the median number of titles in the library has risen from 110 to 125, and the proportion of programs with 200 or more titles has risen from 27 percent to 35.5 percent.

Following is a breakdown of the findings according to enrollment size. Averages rather than medians are reported inasmuch as the former could be readily calculated on the basis of the machine tabulations, whereas the latter could not be arrived at without an inordinate amount of handwork.

<i>Number of Enrollments</i>	<i>Number of Programs</i>	<i>Average Number of Titles</i>
Less than 10	34	100
10-19	154	126
20-29	98	214
30-39	83	235
40-49	65	230
50-59	29	206
60-69	22	264
70-99	49	240
100 or more	26	258
Not reported	28	192

It will be noted, as might be expected, that in the large, the greater the number of enrollments, the greater the

average number of titles. However, examination of the raw data showed that a number of smaller programs equaled or surpassed some of the larger programs in the actual number of titles acquired.

Five hundred and fifty-eight programs reported the number of titles added during the last school year. The findings according to enrollment size were as follows.

<i>Number of Enrollments</i>	<i>Number of Programs</i>	<i>Average Number of Additions</i>
Less than 10	30	19
10-19	153	23
20-29	92	30
30-39	76	27
40-49	59	33
50-59	28	27
60-69	21	37
70-99	47	32
100 or more	24	27
Not reported	28	28

A total of 585 programs responded to the query regarding the number of nursing periodicals to which the library subscribed. Since enrollment size did not appear to be an influential factor, the findings are shown according to number of subscriptions only.

<i>Number of Subscriptions</i>	<i>Number of Programs</i>
1-2	86
3-4	218
5-6	169
7-8	47
9 or more	65

TABLE 18. NUMBER OF PROGRAMS WITH PRACTICAL NURSING COLLECTIONS BY LIBRARY RESOURCES AND ADMINISTRATIVE CONTROL

Library Resources	Number of Programs by Administrative Control								
	Total	Secondary School	Trade, Technical, or Vocational Education	University or Senior College	Community or Junior College	Government Hospital	Other Hospital	Independent Agency	Government Agency Other than Hospital
Type of Library									
Separate	353	18	197	1	29	22	77	6	3
Combined									
Medical—nursing	46	2	23	3	3	4	11	—	—
Nursing—other vocational programs	80	13	46	2	11	1	7	—	—
Other	182	18	97	4	36	2	23	2	—
Collection housed in room used only as library	310	17	153	3	27	19	84	5	2
Audio-visual aids available	585	45	315	11	72	25	106	8	3
Library needs provided for in budget	452	36	247	7	65	14	73	8	2
Separate item in budget for audio-visual aids	291	24	161	6	53	9	35	1	2

Each of the totals includes one or more programs of each enrollment size, and well over half of the 65 programs that subscribed to 9 or more nursing journals had enrollments ranging from less than 10 to 39.

Although only the faculty of a particular program is in a position to judge the adequacy of the library resources, so that over-all minimums cannot be set, it is apparent from the findings that a good many programs are failing to meet the needs of their students in this respect. While the averages reported earlier indicated that the small programs had the lowest number of titles, a spot check of the raw data revealed a good number of programs of various enrollment sizes with

obviously inadequate libraries and some small programs with adequate collections. Also, the findings regarding the number of titles added during the last school year showed that some faculties are overlooking the importance of reviewing their holdings and replacing outdated materials. Today, with the rapid expansion of scientific knowledge and changing practices in medicine and nursing, the importance of maintaining an up-to-date library is greater than ever.

Despite the lacks of some programs, however, the findings showed that substantial gains in library resources have been made by the large majority of programs.

IX. EVALUATION

"The curriculum is assessed systematically and periodically" "Student achievement, including clinical performance, is systematically evaluated throughout the program." "There is a periodic follow-up of graduates"

The performance of individual students was evaluated for promotion and graduation on the basis of grades achieved on teacher-made tests in 700 of the 722 programs studied. In 668, the bases of evaluation included performance evaluation ratings by instructors employed by the school, and in 605, student performance on standardized achievement tests was a means used. Only 256 programs used performance evaluation ratings by instructors employed by cooperating agencies, but as many as 451 programs used ratings by nursing service personnel.

Licensure Examinations

Information concerning the performance on the State Board Test Pool Examination of the last two graduating classes was requested. Some schools indicated that MDTA students were considered a separate class, graduating at a different time from the others; some programs were too newly established to have graduated a class. One director wrote in — probably with pride rather than with indignation — "Our students always pass their examinations the first time." However, the responses showed that in 1964, 23,302 graduates took the licensure examination for the first time and 20,883 passed the examination on first trial. This compares fairly well with the results for the preceding year, during which 22,406 graduates took the examination for the first time and 20,469 passed on first trial. However, it should be noted, as analysis of the foregoing figures shows, that the percentage of failures crept up from 8.6 percent in 1963 to 10.3 percent in 1964.

Evaluation of the Program

The programs were asked to indicate what data and information were used as means of evaluating the program as a whole. The responses are summarized in Table 19. Examination of the raw data showed that the responses varied widely from program to program. One used only suggestions and recommendations of state board visitors, state supervisors, or other consultants. Two used the suggestions of such persons and the performance of graduates on licensure examinations. Seven used all of the means listed. It was not

possible to determine the median number used without an inordinate amount of hand tabulation, but it was evident that a good many programs need to be encouraged to use a variety of evaluation methods in order to discover whether the objectives are being attained.

Follow-up of Graduates

Besides the schools that had not yet graduated a class, there were a number of schools that did not do follow-up studies of their graduates. The responses of the schools that replied to the question regarding the activities of the graduates of their last two graduating classes are summarized in Table 20.

According to the data shown in the table, 80 percent of the graduates were employed in hospitals, while only 5 percent were employed in nursing homes. Slightly over 1 percent were enrolled in other programs of nursing education, and only about 5 percent were unemployed. It would appear that an educational program whose graduates are about 95 percent employed is satisfying a community need.

TABLE 19. DATA USED IN EVALUATION OF THE PROGRAM

<i>Data</i>	<i>Number of Programs</i>
Suggestions and recommendations of state board visitors, state supervisors, or other consultants	676
Opinions of total faculty	664
Performance of graduates on licensure examinations	658
Opinions of nursing service personnel	625
Student performance on standardized achievement tests	605
Opinions of students	579
Opinions of hospital administrators	509
Reports from cooperating agencies on student performance	424
Follow-up studies of graduates	407
Study of cost of the program	233
Other	39

TABLE 20. DISTRIBUTION OF 23,608 GRADUATES BY TYPE OF EMPLOYMENT OR CONTINUING EDUCATION AND ADMINISTRATIVE CONTROL OF PROGRAM

Type of Employment or Continuing Education	Number of Programs and Number of Graduates by Administrative Control of Programs														Total			
	Secondary School		Trade, Technical, or Vocational Education		University or Senior College		Community or Junior College		Government Hospital		Other Hospital		Independent Agency		Government Agency Other than Hospital		Schools	Grads
	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads	Schools	Grads
Hospital	42	1,141	357	10,081	11	365	78	2,064	27	769	124	3,307	8	290	3	55	650	18,072
Nursing home	19	43	227	632	9	16	52	152	13	38	69	186	5	25	—	—	394	1,092
Private duty	8	17	147	334	3	5	36	87	5	10	44	89	5	29	—	—	248	571
Employed in office or agency other than hospital or nursing home	16	22	189	400	5	13	46	120	11	14	60	145	5	26	1	38	333	778
Other occupation in health field	2	4	48	76	4	5	15	17	3	5	15	22	1	2	—	—	88	131
Other occupation outside of health field	5	6	47	70	2	3	9	11	4	8	12	17	1	2	—	—	80	117
Continuing practical nursing education	6	11	37	74	1	1	13	51	3	10	21	44	1	4	—	—	82	195
Enrolled in nursing program leading to RN licensure	18	44	60	96	3	6	20	25	10	19	35	64	3	17	—	—	149	271
Neither employed nor continuing education	23	75	206	561	10	36	49	150	19	40	69	228	3	24	1	2	380	1,116
Not known	14	66	133	555	8	41	41	234	16	86	47	228	4	48	1	1	264	1,259
Deceased	1	1	3	3	—	—	1	1	—	—	1	1	—	—	—	—	6	6
Total	154	1,430	1,454	12,882	56	491	360	2,912	111	999	497	4,331	36	467	6	96	2,668	23,608

X. ANALYSIS OF MDTA PROGRAMS

Of the 150 educational programs in practical nursing established with or partially supported by MDTA funds, 81 returned the questionnaire. Of these, 20 were older programs that had availed themselves of such funds to enlarge their student bodies, and 61 were new programs established under the Act. An analysis of the latter group provided some interesting data. The variation in the programs was striking.

The faculty qualifications were tabulated first. A total of 287 faculty members were listed, and their educational backgrounds were as follows:

- 36 held a masters degree, 3 of which were in nursing.
- 133 held a baccalaureate degree, 11 of which were B.S.N.'s.
- 1 held an Associate in Arts degree.
- 117 were qualified only by a diploma in nursing.

The proportion of the total number with a baccalaureate or higher degree was 59 percent.

More significant, however, was the distribution of the faculty among the various programs. Of the 36 holding a masters degree, 20 were directors or coordinators. It was not possible to determine how many of the 20 were non-nurses who might be directors of the school as a whole rather than the more closely associated directors or coordinators of the nurse faculty of the program. Several held a masters degree in education; 1 held an M.A. in nutrition; and in some instances, it was indicated that the director/coordinator did no teaching. All but 4 of the rest of the director/coordinators held a baccalaureate degree; the 4 without a degree headed programs in which no member of the faculty held a degree. Again, there was no way of ascertaining whether those with a baccalaureate degree were directors of the school or nurse directors of the program except in six instances in which the degree held was either a B.S.N. or B.S.N.E.

Analysis of the data revealed striking differences in standards. In some programs, all of the faculty members held degrees, and in others, none were so qualified. One program in a certain state had a faculty of 10 members, 2 of whom held a masters degree and 8 a baccalaureate degree, and another program in the same state had a faculty of 11 members, 5 of whom held a masters degree and 6 a baccalaureate degree. These two programs were in sharp contrast with yet another program in that state, which had a total of 5 faculty members, including the coordinator, none of whom held a degree.

The ratio of instructors to students also varied from program to program. For example, there were 9 instructors (8 full-time and 1 part-time) to 29 students

in one program and 9 to 75 in another. Other examples were 7 to 32, 4 to 20, and 5 to 60. It is interesting to note with respect to the last two examples that all 4 of the instructors responsible for 20 students held a baccalaureate degree, while none of the 5 instructors responsible for 60 students held a degree.

The length of the programs varied considerably, ranging from 42 weeks to 62 weeks, exclusive of vacation time. The number of weeks of teaching in the 61 programs were as follows.

<i>Number of Programs</i>	<i>Number of Weeks</i>
2	62
3	52
1	51
17	50
2	49
22	48
1	47
2	46
2	45
1	44
7	43
1	42

The two longest programs were in Massachusetts, where the length is set by law at no less than 15 months.

The findings pertaining to the library also revealed great variation among the programs. Six had no practical nursing collections; several had from 20 to 40 titles, and the remainder had from 60 to several hundred, the largest collection consisting of 675 titles. Again, some programs had no nursing periodicals and others had as many as 9 or more.

The over-all rate of withdrawal of students, or attrition rate, was not high, nor was the percentage of failures on state board examinations. Of the 1,338 students enrolled in the 44 programs that had graduated a class, 1,002 graduated and took the state licensure examination. Of this number, 64 failed. The attrition rate for the 44 programs was 25.1 percent, and the percentage of failures on the licensure test was 6.3. Again, however, the data showed striking differences among programs.

In 19 of the 44 programs, there were no failures on the state board examination. In another 10 programs, there was only 1 failure in each of the 12 classes that had been graduated. In the remaining 15 programs, each of which had graduated 1 class, there were 52 failures. The distribution of failures among the 15 programs is shown in Table 21.

Analysis of the data presented in Table 21 shows that the withdrawal rate for the 15 programs was 26.6 percent, a rise of only 1.5 percent over the rate for

TABLE 21. ENROLLMENTS, WITHDRAWALS, AND GRADUATIONS IN 15 MDTA PROGRAMS AND PERFORMANCE OF GRADUATES ON LICENSURE TEST

Program	Number of Enrollments	Number of Withdrawals	Number of Graduates	Number of Graduates Passing Licensure Test	Number of Graduates Failing Licensure Test
No. 1	28	5	23	20	3
No. 2	25	6	19	15	4
No. 3	30	10	20	16	4
No. 4	24	5	19	12	7
No. 5	20	5	15	13	2
No. 6	31	11	20	18	2
No. 7	30	1	29	27	2
No. 8	25	9	16	14	2
No. 9	20	6	14	8	6
No. 10	30	14	16	14	2
No. 11	53	19	34	30	4
No. 12	40	9	31	28	3
No. 13	24	6	18	15	3
No. 14	28	7	21	17	4
No. 15	24	2	22	18	4
Total	432	115	317	265	52

all 44 programs. However, the percentage of failures among the candidates for licensure was 16.4, an increase of 10.1 percent over the proportion of failures among the graduates of all 44 programs. Such an increase in percentage of failures in these few programs augments the percentage of failures among the graduates of all 722 programs in the study. Also, it should be noted that 17 of the newly established MDTA programs in the study had not yet graduated a class and therefore could not be included in the foregoing analysis and that 69 of the 150 MDTA programs that had been established by June of 1965 did not return the questionnaire.

The over-all costs of these programs could not be estimated. On some of the questionnaires, however, the amount of financial assistance given to students was indicated. In some programs, the amount granted to individual students exceeded \$2,000. In one program, 39 students were given grants, the total amount of which was \$65,000. In another program, 16 students were allotted \$30,000; in another, 11 students were allotted \$27,000; and in still another, 9 students were allotted \$21,450. These expenditures were, of course, in addition to the regular cost of faculty and teaching resources. Only a small portion of the pro-

grams reported information on student assistance, some stating that the amounts granted were unknown. However, it was stated by MDTA officials in one state that payments to students are between \$1,107 and \$2,204 per student, depending upon individual needs.

It appears from this analysis of programs established under the Manpower Development and Training Act that there is wide variation in the standards for admission or in the quality of the teaching and the teaching facilities. Since large amounts of money are being used not only to set up these programs but also to subsidize the students, it would seem that educational standards should be as uniform as possible and of the highest level, so that each qualified student might have every opportunity to graduate, become licensed, and enter the employment field.

Since it is the aim of the Act to reduce the number of unemployed and to alleviate the shortage of workers in various fields, it is wasteful of the time of qualified faculty to enroll students whose lack of abilities prevents them from completing the program. It is also unfair to those students who do have the ability to complete the program to be taught by faculty who are either not qualified for teaching or are inexperienced in this field of nursing.

XI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

It was hoped that the report of the 1960 survey and the recommendations it contained would stimulate improvement in existing programs. The present study shows that the programs as a whole have moved well ahead in several areas but not to the same extent in others.

There has been a continuing upward trend in the educational background of entering students, as was predicted in the first study; and there has been a reduction in the number of programs in which stipends are paid to students. The majority of programs have a written philosophy and written objectives. Clinical instructors are being employed in greater numbers by the controlling agencies, and the instructors are selecting the learning experiences. There has been a substantial increase in the number of programs that include experience in the care of mentally or emotionally disturbed patients. The findings show, also, that experimentation in providing an integrated or more unified curriculum is being carried on in many schools.

On the other hand, it is evident that in many programs, library holdings are still inadequate for the number of students enrolled and that the budget for such resources is markedly out of line with the total budget for the program. Dropouts in some programs continue to be a major and costly problem, which suggests that the screening of applicants could be improved. While some programs have faculty qualified by degrees in one area or another and have ratios of students to faculty as low as six to one, some programs are operating with only one faculty member who is responsible for all of the teaching in the program.

Conclusions

It would seem that programs are at times set up too hastily; that is, before the proper resources have been procured. Again, some programs have been shortened to a length that is questionable as to its being commensurate with the behavioral changes that should be expected in students in a program of practical nursing.

The picture as a whole, then, is complicated — the improvement of some programs being offset by a lack of improvement or a lowering of standards in others. Analysis of the data in this study should be helpful in planning for further improvement. There appears to be a need for utilizing (1) more effective means of selecting students, (2) higher standards for the selection of faculty, and (3) better means of ensuring adequate educational and clinical resources. The length of the programs should be studied in terms of expected outcomes. It seems unreasonable for programs varying

in length from 9 to 12 months to exist side by side in one state, or for those in another nearby state to be required by law to be 15 months in length. A finding that seems even more unreasonable is that some of the programs that are less than 12 months long are admitting students with considerably less educational background than that required by the majority of programs and are employing faculty who are relatively inexperienced. Programs bear the responsibility of preparing practitioners who can fulfill the accepted functions⁶ of the licensed practical nurse, irrespective of the type of administrative control or funding.

Recommendations

In order that the limited numbers of qualified faculty and the limited clinical resources may be used advantageously in supplying practical nurse power for this country, it is recommended:

1. That methods that have been tested and proved effective in the selection of students most likely to succeed in programs in practical nursing be used in the screening of applicants by all programs.
2. That faculty for programs in practical nursing be selected not only in terms of degrees held but also in terms of preparation for teaching and knowledge of the field of practical nursing education.
3. That provision be made within the budget for establishing a nursing library for both students and teachers that is adequate in titles and number of volumes to the needs and the number of student enrolled and to the needs of the teachers.
4. That the practical nursing programs with small enrollments be closed and that only larger programs in which the ratio of faculty to students can be lessened without loss of efficiency be established in the future.
5. That no MDTA programs be established near already existing programs of practical nursing and that students subsidized by such funds be enrolled in the existing programs and faculty added as required.
6. That before additional programs of practical nursing are initiated, whether under voluntary or governmental auspices, a study of the community be done to determine need for the program, availability of adequate educational and clinical resources, and availability of prepared faculty.

⁶ American Nurses' Association. *Statement of Functions of the Licensed Practical Nurse*. New York, the Association, 1964.

APPENDIX

NATIONAL LEAGUE FOR NURSING
10 Columbus Circle, New York, New York 10019

QUESTIONNAIRE SURVEY OF PRACTICAL NURSING PROGRAMS-1965

Directions: Please place an appropriate answer or answers for each question in the spaces provided. Please read all questions carefully and if you are sure there is no appropriate answer for your situation indicate this with either a 0 or N.A. in the answer space. A definition sheet is enclosed for your use.

Name of person completing questionnaire _____
Title _____

For Office Use Only

- 11- _____
- 12- _____
- 13- _____
- 14- _____
- 15- _____
- 16- _____

Please return one copy in the enclosed envelope by April 23, 1965 if possible

to
National League for Nursing, Research and Studies Service
10 Columbus Circle, New York, New York 10019

GENERAL INFORMATION

1. In what year was the program established? _____
Do not write in this space 2781

2. Is the primary hospital accredited by the Joint Commission on Accreditation of Hospitals?
Yes No Do not write in this space 17-18

3. Do you have a stated philosophy for the program?
Yes No Do not write in this space 19-1

4. Is the philosophy oral or written?
Oral Written Do not write in this space -2

5. Do you have stated objectives for the over-all program?
Yes No Do not write in this space -0

6. Are the objectives oral or written?
Oral Written Do not write in this space 23-1

No objectives Do not write in this space -2

If there are objectives, by whom were they developed? (check only one) Do not write in this space -3

A nurse director/coordinator of the program Do not write in this space -0

A non-nurse director/coordinator of the program Do not write in this space 24-1

The faculty Do not write in this space 25-1

The faculty with consultant(s) Do not write in this space 26-1

A staff member of the controlling institution other than the above Do not write in this space 27-1

Other than above (specify) _____ Do not write in this space 28-1

_____ Do not write in this space 29-1

STUDENTS

	Jan.-June 1962	July-Dec. 1962	Jan.-June 1963	July-Dec. 1963
7. Number of students who entered	30-32	33-35	36-38	39-41
8. Number of those reported in line a who completed the program	42-44	45-47	48-50	51-53

9. What was the total student enrollment on April 1, 1965? _____ Do not write in this space 54-56

10. What evidence of capability is required before a student is selected for admission? (check)

Previous school record Do not write in this space 57-1

Pre-entrance qualifying test Do not write in this space 58-1

Personal and/or work references Do not write in this space 59-1

Physical examination Do not write in this space 60-1

Personal interview Do not write in this space 61-1

11. If the students were required to take a pre-entrance test to qualify for admission, what tests are used? (check)

The General Aptitude Test Battery (GATB) Do not write in this space 62-1

The NLN Pre-Admission and Classification Examination (PACE) Do not write in this space -2

The Otis Quick-Scoring Mental Ability Test Do not write in this space -3

The Psychological Corporation Entrance Examination for Schools of Practical Nursing Do not write in this space -4

Other (please name or describe) _____ Do not write in this space -5

_____ Do not write in this space -6

_____ Do not write in this space -7

_____ Do not write in this space -8

_____ Do not write in this space -9

_____ Do not write in this space -0

12. The following questions pertain to applications and admissions for the classes entering in the last complete academic or fiscal year. If records of inquiries or applications were not kept, please estimate.

a. How many inquiries were received asking about admission to the class(es) entering that year? Do not write in this space 63-66

b. How many persons made an application for admission? Do not write in this space 67-70

c. How many applicants were qualified for admission to the school on the basis of pre-testing or total screening process? Do not write in this space 71-73

d. How many applicants were accepted for admission? Do not write in this space 74-76

e. How many students were actually admitted? Do not write in this space 77-79

17. Indicate student aid and stipends given to the members of last class completing program:
(Please indicate when numbers of students or total amount is zero.)

	Number of Students Aided	Estimated TOTAL Amount for these Students
Loans	17-19	\$ 20-24
Scholarships	25-27	\$ 23-32
Stipends or subsistence:		
Hospital	33-35	\$ 36-40
MDTA	41-43	\$ 44-48
Other (specify)	49-51	\$ 52-56
Salary*	57-59	\$ 60-64
Other (specify)	65-67	\$ 68-72

*Salary which is continued by a former employer while the student attends the program.

Do not write in this space

15. On what basis is the performance of individual students evaluated for promotion and graduation? (check)

- Grades on teacher-made tests 61-1
- Scores on standardized achievement tests. 62-1
- Performance evaluation ratings by instructors employed by the school 63-1
- Performance evaluation ratings by instructors employed by the cooperating agencies 64-1
- Performance evaluation ratings by nursing service personnel 65-1
- Other (specify) 66-1

2783

16. State total cost to one student for entire program (exclude personal expenses such as personal clothing). If there is no charge for a given item, please indicate with \$0.

- Tuition: All students \$ 17-10
 - or Resident \$ 21-23
 - and Non-resident (out of city, county or state) \$ 24-27
 - Testing, application, and admission fees \$ 28-29
 - Required health examination fees \$ 30-31
 - Required hospital and medical care insurance \$ 32-34
 - Other fees (specify) \$ 35-36
 - Uniforms \$ 37-38
 - Textbooks \$ 39-40
 - Laundry \$ 41-42
 - Other charges or required purchases (specify) \$ 43-44
- If room and board are provided for some or all students:
- Room (total for one student for entire program) \$ 45-48
 - Board (total for one student for entire program) \$ 49-52

Do not write in this space

13. Of the last two graduating classes, how many students passed the licensure examination the first time it was taken?

- For the class graduating in 19.....
- a) Number of graduates in this class 17-19
- b) Number of graduates in a) taking the examination 20-22
- c) Number of graduates in b) passing examination on first trial 23-25
- For the class graduating in 19.....
- a) Number of graduates in this class 26-28
- b) Number of graduates in a) taking the examination 29-31
- c) Number of graduates in b) passing examination on first trial 32-34

14. State the number of graduates of the last two graduating classes who, to the best of your knowledge, are:

- a) employed in hospitals 35-37
 - b) employed in a nursing home 38-39
 - c) employed in private duty nursing 40-41
 - d) employed in an office or agency other than a hospital or nursing home 42-43
 - e) neither employed nor continuing education in nursing 44-46
 - f) continuing formal education in practical nursing 47-48
 - g) enrolled in a professional nursing program 49-50
 - h) other health field occupations 51-52
 - i) other non-health field occupations 53-54
 - j) not known 55-57
- Total number of graduates of last two classes 58-60

2785
17-1
-2
-0

18-1
-2
-3
-0

25
26
27
28
29
30

31-32

_____ days
No stated policy

22. Plan of curriculum over total months in program for the typical student. (Fill in the number of hours of class and laboratory per month in each area of the curriculum and the number of hours per month of clinical experience. If more than 12 months in program, use page seven.)

Areas of the Curriculum	Number of Hours class, Laboratory, and Clinical Experience Each Month												
	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9th Month	10th Month	11th Month	12th Month	
Fundamentals of Nursing:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Nutrition:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Biological and Physical Sciences:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Social Foundations and Vocational Relations:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Medical-Surgical Nursing:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Nursing of Children:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Nursing of Mothers and Newborn:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												
Psychiatric Nursing:	Class Hours												
	Classroom Lab. Hours												
	Clinical Exp. Hours												

Do not write in this space
 2787
 17-1
 -2
 -3
 -4
 -5
 -6
 -7
 -8
 -9
 -0
 18-1
 -2
 -3
 -4
 -5
 -6
 -7
 -8
 -9
 -0
 19-1
 -2
 -3
 -4
 -5
 -6
 -7
 -8
 -9
 -0
 20-1
 -2
 -3
 -4
 -5
 -6
 -7
 -8
 -9
 -0
 21-1
 -2
 -3
 -4
 -5
 -6
 -7
 -8
 -9
 -0

Do not write in this space

33-35

36-37

38-40

2786

CURRICULUM

20. Length of scheduled program Weeks
 Length of scheduled vacation Weeks
 Total Weeks

21. Curriculum content for the total program for a current class:

Please place all course content in what you consider the most appropriate category.

Areas of the Curriculum	Number of Clock Hours in Classroom	Number of Clock Hours in Classroom Laboratory	Number of Clock Hours Clinical Experience
Fundamentals of Nursing: including care of environment	17-19	20-22	23-25
Nutrition: including diet therapy, food preparation, etc.	26-28	29-30	31-33
Biological and Physical Sciences:	34-36	37-38	39-40
Social Foundation and Vocational Relations: (Psychology, Sociology, Communications, Professional Adjustment, Trends, etc.)	41-43	44-45	46-47
Medical-Surgical Nursing: including care of aged and long-term illness	48-50	51-52	53-56
Nursing of Children:	57-58	59-60	61-63
Nursing of Mothers and Newborn:	64-65	66-67	68-70
Psychiatric Nursing:	71-72	73-74	75-77
Total:			

Do not write in this space

27. What data and information about the educational program are used by the faculty in the evaluation of the program? (check)

Opinions of total faculty 17-1

Opinions of hospital administrators 18-1

Opinions of nursing service personnel 19-1

Opinions of students 20-1

Student performance on standardized achievement tests 21-1

Reports from cooperating agencies on level of student performance 22-1

Performance of graduates on State Board Examinations 23-1

Suggestions and recommendations of State Board visitors, State supervisors, or other consultants 24-1

Follow-up studies of graduates 25-1

Study of the cost of the educational program 26-1

Other (specify) _____ 27-1

28. How many nurse and non-nurse faculty members, including the director/coordinator of the program, are employed to teach in the practical nursing program?

Part-time faculty are those who are employed for a time less than the full faculty work week in your program;
or are employed part of the year;
or are nurses who carry nursing service responsibilities;
or faculty with teaching responsibilities in the school or college in other than the practical nursing program.

	Nurse faculty	Non-nurse faculty
Full-time	28-29	30
Part-time	31-32	33

Do not write in this space

23. What is the average daily census in the primary hospital? _____

24. How many cooperating agencies other than the primary hospital provide at least 25 hours of clinical experience for the students? _____

25. State the number of weeks of clinical practice and experience throughout the program:

a) in all hospitals used:

day weeks 26-28

afternoon or evening weeks 29-30

night weeks 31-32

b) in nursing homes or homes for the aged or the infirm weeks 33-34

c) in other agencies weeks 35-36

26. What hospital services are utilized for clinical experience? (include all clinical experience)

Medical and/or surgical patient units _____ hours 37-40

Chronic disease or long-term illness units _____ hours 41-43

Obstetrical patient units _____ hours 44-46

Newborn nursery _____ hours 47-49

Operating room _____ hours 50-52

Pediatric patient units _____ hours 53-55

Central supply service unit _____ hours 56-58

Diet kitchen or other food preparation areas _____ hours 59-61

Recovery room and/or intensive care units _____ hours 62-64

Psychiatric patient units _____ hours 65-67

Other (please specify) _____ hours 68-70

Total _____ hours 71-74

_____ hours 75-77

Plan of Curriculum over total months in program for the typical student (continued):

Areas of the Curriculum	Number of Hours, Class, Laboratory and Clinical Experience Each Month											
	13th Month	14th Month	15th Month	16th Month	17th Month	18th Month	19th Month	20th Month	21st Month	22nd Month	23rd Month	24th Month
Fundamentals of Nursing:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp. Hours											
Nutrition:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp., Hours											
Biological and physical sciences:	Class Hours											
	Classroom Lab. Hours											
Social Foundations and Vocational Relations:	Class Hours											
	Classroom Lab. Hours											
Medical-Surgical Nursing:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp., Hours											
Nursing of Children:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp., Hours											
Nursing of Mothers and Newborn:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp. Hours											
Psychiatric Nursing:	Class Hours											
	Classroom Lab. Hours											
	Clinical Exp., Hours											

Do not write in this space

Do not write in this space	Do not write in this space	Do not write in this space	Do not write in this space	Do not write in this space
OTHER RESOURCES				
17-1 -2 -0	37. Is there a practical nursing program library collection? Yes <input type="checkbox"/> No <input type="checkbox"/>	34.1 -2 -0	46. Who has the responsibility for determining the budget needs of the nursing program? Director/coordinator of the program..... Administrative officer of the controlling institution Other (specify)	60.1 -2 -3 -4 -5 -0
18-1 -2 -3 -4 -9 -0	If yes, where is it housed? in a separate nursing school library <input type="checkbox"/> in a combined medical-nursing library <input type="checkbox"/> in a combined nursing-other vocational programs library <input type="checkbox"/> other (specify) _____ <input type="checkbox"/>	35 36-37 38	47. Who approves the budget request? Director-coordinator of the program Administrative officer of the controlling institution Board of Trustees, of Education, or other Other (specify) _____	61.1 -2 -3 -4 -5 -0
19-1 -2 -9 -0	38. How many different titles (exclusive of fiction) are there for use by practical nurse students? (For combined libraries, give practical nursing program holdings only.) _____	39-40 41-42 43-44 45-46	48. Is there a separate budget for the nursing program? Yes <input type="checkbox"/> No <input type="checkbox"/>	62.1 -2 -0
20-21	39. How many of these different titles were added during the last school year? _____	47-48	49. Are there written contracts or agreements with other institutions that provide learning and practice experience for the students? Yes <input type="checkbox"/> No <input type="checkbox"/>	63.1 -2 -3 -0
22-24	40. To how many bona fide nursing periodicals does the library subscribe? _____		If yes, what is the duration of the contracts? one year two years three years more than three years an indefinite period of time varies with institution	64.1 -2 -3 -4 -5 -6 -7 -0
25-26	41. Are the library needs provided for in the budget for the school or program? Yes <input type="checkbox"/> No <input type="checkbox"/>		50. If there are written contracts or agreements, do they state: the learning experiences expected Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	65.1 -2 -3 -4 -0
27	No separate library budget for school <input type="checkbox"/>		that the responsibility for supervision and teaching of students is fixed with faculty employed by the controlling institution? (see definition) Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	66.1 -2 -3 -4 -0
28-1 -2 -3 -0	If yes, what amount (exclusive of salaries) is budgeted as a separate item for the current fiscal year? \$ _____ No separation <input type="checkbox"/>		that the responsibility for supervision and teaching is shared by faculty employed by the controlling institution with others? Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	67.1 -2 -3 -4 -0
29-31	42. Is a centralized collection of audio-visual teaching materials suitable for practical nursing programs available for the use of the faculty? Yes <input type="checkbox"/> No <input type="checkbox"/>		the physical facilities to be used in the cooperating agency? Patient units Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	68.1 -2 -3 -4 -0
32-1 -2 -0	43. Is there a separate item in the budget for purchase or rental of audio-visual aids? Yes <input type="checkbox"/> No <input type="checkbox"/>		Classrooms Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	70.1 -2 -3 -4 -0
33-1 -2 -3 -0			Conference rooms Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	71.1 -2 -3 -4 -0
			Faculty offices Yes for all contracts <input type="checkbox"/> Yes for some, but not all contracts <input type="checkbox"/> No <input type="checkbox"/>	72.1 -2 -3 -4 -0