

DOCUMENT RESUME

ED 086 903

CE 000 946

AUTHOR Markowitz, Selma Lee
TITLE Articulation of Educational Programs for
Nursing-Related Health Occupations. Final Report.
INSTITUTION Connecticut Inst. for Health Manpower Resources,
Hartford.
SPONS AGENCY Connecticut State Dept. of Education, Hartford. Div.
of Vocational Education.
PUB DATE May 73
NOTE 124p.

EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS *Articulation (Program); Behavioral Objectives;
*Educational Programs; Health Occupations; *Health
Occupations Education; Individualized Programs;
Interagency Cooperation; Intercommunication;
*Nursing; Occupational Information; Task Analysis
IDENTIFIERS Connecticut

ABSTRACT

A four-month study was undertaken to prepare a plan for the articulation of those educational programs for nursing-related health occupations for which the Connecticut Division of Vocational Education shares responsibility: nursing assistant programs in the comprehensive high schools; practical nurse education programs; and community college associate degree nursing programs. Study procedures followed were: (1) a review of literature, (2) an analysis of State legal restrictions pertaining to the three nursing levels, (3) an analysis of the instructional curricula and determination of commonalities of the three nursing levels, (4) job descriptions for the three levels, and (5) the holding of workshops. Conclusions were that nursing articulation is feasible and practical. Recommendations were that: (1) through task analysis a standardization of behavioral objectives and competency requirements for nursing-related educational programs be undertaken, (2) active measures be taken to implement alternative pathways (e.g., education by module, credit by examination and external degree programs), and (3) channels for intercommunication and collaboration among all persons and organizations involved in or sharing responsibility for nursing education be established (workshops, seminars, and newly-created or activated State/regional/local councils and task-oriented committees). (EA)

ED 08640

ARTICULATION OF EDUCATIONAL PROGRAMS
 FOR
 NURSING-RELATED HEALTH OCCUPATIONS

FINAL REPORT

MAY, 1973

U.S. DEPARTMENT OF HEALTH,
 EDUCATION & WELFARE
 NATIONAL INSTITUTE OF
 EDUCATION

CONNECTICUT INSTITUTE FOR HEALTH MANPOWER RESOURCES, INC.

770 Asylum Avenue

Hartford, Connecticut 06105



CONNECTICUT STATE DEPT. OF EDUCATION
 DIVISION OF VOCATIONAL EDUCATION
 RESEARCH AND PLANNING UNIT
 HARTFORD, CONNECTICUT

CE 000 746

ED 086903

ARTICULATION OF EDUCATIONAL PROGRAMS
FOR
NURSING-RELATED HEALTH OCCUPATIONS

FINAL REPORT

SEIMA LEE MARKOWITZ, MPH
PROJECT DIRECTOR

CONNECTICUT INSTITUTE FOR HEALTH MANPOWER RESOURCES, INC.

770 Asylum Avenue
Hartford, Connecticut 06105

MAY, 1973

Points of view or opinions stated do not necessarily represent official opinion or policy of state or federal governmental agencies, as the writers are encouraged to express freely their professional judgment in the conduct of the project.

CONNECTICUT STATE DEPT. OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
RESEARCH AND PLANNING UNIT
HARTFORD, CONNECTICUT

CONTENTS

| | |
|---|------|
| Preface..... | i. |
| Acknowledgements..... | iii. |
| Summary..... | 1. |
| SECTION ONE--Background and Setting of Study..... | 3. |
| SECTION TWO--Methods | |
| PART A: Literature Review..... | 6. |
| PART B: Legal Aspects..... | 6. |
| PART C: Program Analysis..... | 6. |
| PART D: Job Descriptions Analysis..... | 7. |
| PART E: Workshops and Meetings..... | 10. |
| SECTION THREE--Findings | |
| PART A: Review of Literature..... | 15. |
| PART B: Legal Findings..... | 34. |
| PART C: Program Analysis..... | 39. |
| PART D: Job Descriptions Findings..... | 49. |
| SECTION FOUR--Conclusions..... | 56. |
| SECTION FIVE--Recommendations | |
| PART A: Articulation Model..... | 57. |
| PART B: Articulation Organization Model..... | 66. |
| APPENDICES | |
| Directory of NA, LPN and AD/RN Programs in Connecticut..... | 70. |
| Guidelines for Training NA's..... | 73. |
| Philosophy and Objectives of Practical Nurse Education..... | 79. |
| NECHEN Report on LPN and AD/RN..... | 82. |
| Rules and Regulations: LPN and AD/RN..... | 83. |
| Comparison of Curriculum Content: LPN and AD/RN..... | 84. |
| Arizona Articulated Nursing Program..... | 88. |
| Composite Descriptions: NA, LPN and AD/RN..... | 90. |
| Time-Function Graphs: NA and LPN..... | 96. |
| Task Analysis Consultant Correspondence..... | 98. |
| BIBLIOGRAPHY..... | 100. |

PREFACE

ARTICULATION, according to Webster's Third New Unabridged International Dictionary, is the INTERRELATION OF DIFFERENT LEVELS OF EDUCATION (as elementary, secondary and higher education) for INSURING CONTINUOUS ADVANCEMENT IN LEARNING; it involves the concept of separate items united by joints to be connected in a systematic relationship (as the high school has been articulated with the state university). As specifically related to nursing education, such an interlocking system would not only allow a nurse's aide to move into a licensed practical nurse program and a licensed practical nurse to enter a registered nurse program, but would also grant recognition of previous training/education or practical experiences. While there are no regulations directly prohibiting a nurse from advancing her education, there do exist serious obstacles for the NA or nurse wishing to move to a higher level program.

As the definition indicates, articulation involves both the CONTENT and the PROCESS aspects of education. The first step in an "articulation study" is to look at the CONTENT of the different levels as separate entities, as clearly distinguishable parts: the programs and courses of each of the three levels (NA, LPN and AD-RN). Can each be formulated into clearly distinguishable parts? If not, what can be recommended to help produce a separate entity in each case? If each part of the CONTENT is distinct, what steps can be recommended to connect these parts into a PROCESS of systematic interrelation to accomplish coherent coordination and allow for a continuous advancement in learning? In what manner can those sharing responsibility for the programs be articulated among themselves? How can those systems, held accountable for nursing-related educational programs, (i.e. the State Department of Education, Division of Vocational Education; the Commission for Higher Education; the Board of Examiners for Nursing; the professional accrediting bodies) be systematically interrelated?

The health care facilities which provide the required clinical training for nursing programs have a unique and vital contribution to the nursing educational programs; they, too, must be systematically fitted into this related whole for an articulation plan. What indeed is the relationship between the educational and health care systems, both of which must contribute to the education of the student for acceptance into his/her chosen profession?

An articulation study for nursing educational programs involves a field that is both service and technically oriented, in which legislation and licensure are integral parts, and in which learning activities and training take place in the actual work setting. Any consideration of a workable articulation plan for the education and training of the health occupations student calls for increased cooperation and coordination among health professionals, voluntary agencies, religious and educational institutions, health care facilities, organized labor, government, business and industry, and concerned citizens. The collaboration of these combined resources, efforts and experiences works toward a common goal of producing a student product capable of rendering quality patient care in an effective health care delivery system.

It must be emphasized, then, that it is not the case that any one of the extant institutions involved in or sharing responsibility for the training of nursing personnel must dominate the field if articulation is implemented. The purpose of an articulated system is to offer the widest range of possibilities to individuals of varying needs to be trained as highly qualified nursing personnel at the level of their choice. Numerous alternatives can best be offered if the

universities, the 2 and 4-year colleges, the vocational technical schools, the high schools and the health care facilities all continue to be involved in nursing education and form close collaborative relationships with the other involved agencies and organizations. The thrust of a recommendation for articulation is not, then, for the limitation or narrowing of educational alternatives, but rather for the STANDARDIZATION of behavioral objectives and requirements of cognitive and practical competence at each of the levels, such that individual educational needs can be met without either the patient's safety and well-being or the nurse's future educational/career opportunities being jeopardized.

CIHMR 1973 BOARD OF GOVERNORS

Senator Lucy T. Hammer, President

Frank T. Healey, Secretary

Angelo Mastrangelo, Treasurer

Frederick G. Adams

Ronald S. Beckett

T. Stewart Hamilton

A. E. Hertzler Knox

Thomas F. Malone

Janet Small

Rosemary A. Stevens

Rolf J. Thal

Donald P. Wrenn

Selma Lee Markowitz, Executive Director

ACKNOWLEDGMENTS

The Connecticut Institute for Health Manpower Resources, Inc. would like to acknowledge with appreciation the personal contributions of individuals and organizations from education, health, the professions, government, business and the consumer public.

Throughout the Report individuals have been recognized for their input either on committees or as consultants. There are several persons to whom we would like to extend special thanks:

Claire Reinhardt, Health Consultant for the State Department of Education, Vocational Division; as well as Associate Commissioner Joseph Murphy, and Herbert Righthand, Errol Terrell, Richard Wilson, and Gloria Robinson, all of the same Division within the State Department of Education;

Ann McGuigan of the Board of Nursing Examiners;

To Bernard Shea, Lou Lombardi, Frank McLean of the Commission for Higher Education;

To our capable committee chairpersons, Marguerite White, Robert Gronbach;

To John Glasgow and Rodney Jones of the University of Connecticut;

To Charles Turner, Wanda Hatmaker, Peter McNamara of the New Haven Institute for Allied Health Careers;

Gladys Swanepoel, President of Directors of Nursing Service and her group;

To Diantha Fahey and Robert Bergeron of the Connecticut Hospital Association;

To Barbara Donahoe of the Nurses Task Force and Jean Bowen of Conn. Nurses Association;

To Deans Donna Diers of Yale, Marie Topalis of University of Bridgeport,

Eleanor Gill of University of Conn. Schools of Nursing;

Robert Maxwell and Joseph Gaffney of The Hartford Insurance Group;

To Alison Bailey, Lois Saman, Gladys Staub, Anna E. Wignall, Will Duff,

Jeff Freyman, Sylvia Schudy, Mary Islieb, Lorraine Fischer;

To Harriet Tiebel, National Health Council;

Eleanor Gilpatrick of the Health Services Mobility Study, New York;

To Lillian Robert, Sumner Rosen, Florence Stern, and Judith Lederer, of the Work Study Program, District of Councils 37 AFL & CIO;

To Dean Marguerite Holmes and Pearl Papasian of Hunter College/Bellevue School of Nursing;

To Carrie Lemburg and Lucy Kelley, National League of Nursing;

To Elizabeth Kerr, University of Iowa, also Richard Gamel;

To Jan Danford of Michigan;

To Mildred Schmidt and Wayne Williams of New York State Education;

To Leon Pierce, John Harris, Charles Russell, Vera Artebrun;

To Harold Goldstein of Northeastern University

There were numerous students, instructors, and hospital personnel who were contacted at some time during this four-month study to whom we are indebted.

Recognition is extended to CIHMR staff, including Evarists Berzins, Marilyn Pet, Dana Owens, Ilse Hahn, Laurie Lepow, Martha Terry, Valerie Bray, Helene Alisberg.

A word of appreciation is extended as well to those who served on the Ad Hoc Advisory Committee to the State Dept. of Education for this project.

It is the hope of the Connecticut Institute for Health Manpower Resources, Inc. that this Report will stimulate implementation of articulation for the first three levels of nursing in the State of Connecticut, and in the process, set in motion articulation for the whole of nursing education.

SELMA LEE MARKOWITZ, MPH
Project Director
Executive Director, CIHMR

SUMMARY

The Connecticut State Department of Education, Division of Vocational Education, on the basis of thoughtful discussion and planning concerning a recommendation made by the Sub-Committee for the Improvement of Patient Care of the State Consulting Committee for Training in the Health Occupations, contracted with the Connecticut Institute for Health Manpower Resources, Inc. (CIHMR) to undertake a 4-month study directed towards the preparation of a plan for the articulation of those educational programs for nursing-related health occupations for which that Division shares responsibility. The programs under consideration are:

1. Nursing assistant programs in the comprehensive high schools
2. Practical nurse education programs (responsibility shared with the Board of Examiners for Nursing)
3. Community college Associate Degree Nursing programs (responsibility shared with the Commission for Higher Education, the Board of Examiners for Nursing, and professional accrediting bodies).

The need for such an articulation plan is evidenced by the fact that there presently exists no structural pattern within the state's public educational system to provide for nursing education articulation. The desirability of the articulated type of system, which would create the possibility of a career ladder, has been recognized not only by appropriate groups within the state, but also on the national level by the National Commission for the Study of Nursing and Nursing Education.

The study concerns itself with two objectives:

1. To prepare a plan for the articulation of educational programs for those nursing-related health occupations for which the State Department of Education shares responsibility.
2. To encourage the development of understandings and agreements among agencies and components of the State's public educational system concerned with the approval and operation of the involved programs.

The procedures undertaken towards the realization of these objectives involve:

1. A review of the literature regarding similar projects, including their scope, methodology, evaluation and findings.
2. An analysis and listing of the legal restrictions in Connecticut pertaining to the duties of each of the three levels of nursing considered.
3. An analysis of the behavioral objectives, curriculum content, and depth of the existing programs for these three nursing levels, and a determination of the commonalities of the instructional curricula.
4. The obtaining of the job descriptions appropriate for the three nursing levels from a variety of employing health facilities; the analysis of these in terms of their correlations with offered curricula in existing programs.
5. The holding of Workshops involving external consultants and meetings among the study's research Committees and other involved groups.

The findings arrived at through these procedures warrant the following conclusions:

1. That a number of articulated nursing educational programs of varied nature presently exist throughout the country: NURSING ARTICULATION IS FEASIBLE AND PRACTICAL.
2. That Connecticut laws do not present any serious obstacles to a progressive and creative program for the Nursing Profession; but that some revision of legislation pertaining to nursing education and licensure is warranted.
3. That a BODY OF BASIC KNOWLEDGE AND SKILLS, representing a COMMONALITY among the three levels of nursing considered does exist; that this body of knowledge and skill may be so organized educationally that the individual can expand in depth and scope to a new level of competency.

4. That there is an unmet need in Connecticut for ALTERNATIVE PATHWAYS which should be available to meet individual needs, allowing for consideration and accreditation of any pertinent prior training or experience.
5. That STANDARDS must be agreed upon and met regarding the competency-level required for each of the nursing disciplines.
6. That there is a need for the establishment of APPROPRIATE CHANNELS for intercommunication and collaboration among those persons and organizations involved and responsible for nursing educational programs.

On the basis of the findings and conclusions of this study, CIHMR recommends:

1. That STANDARDIZATION of behavioral objectives and competency requirements for nursing-related educational programs should be undertaken; that this standardization might best be achieved through the methods of TASK ANALYSIS.
2. That, particularly in the light of recent legislation, active measures be taken towards the implementation in Connecticut of ALTERNATIVE PATHWAYS, aspects of an articulated nursing educational system, such as EDUCATION BY MODULE, CREDIT BY EXAMINATION, and "EXTERNAL DEGREE" PROGRAMS; that EXPERIMENTAL PROGRAMS INVOLVING THE CONCEPT OF ARTICULATION be launched.
3. That CHANNELS FOR INTERCOMMUNICATION AND COLLABORATION among all persons and organizations involved in or sharing responsibility for nursing education be established; these channels should include both short-term procedures (WORKSHOPS, SEMINARS) and also newly-created or re-activated COUNCILS and TASK-ORIENTED COMMITTEES, on the state, regional and local levels, to provide on-going vehicles for effective articulation, planning and implementation.

SECTION ONE--BACKGROUND AND SETTING OF STUDY

Rapid changes which have taken place in the health field during the past decade, including the proliferation of new allied health careers, changing patterns of manpower utilization and increasing complexity of medicine, have presented serious challenges to the health care delivery system. Therefore, the need for more thoughtful planning for the real needs of the community, including careful allocation of professional health manpower and financial resources, is now assuming greater importance.

The nursing profession has not been exempt from society's insistence that more and better health care be made readily available to all its members, but defining the role of the nurse in the health care team has not proven to be an easy task any more than determining the responsibilities which separate nurses of different educational levels from each other. Predicting future demands for nurse practitioners cannot be accomplished successfully in isolation from an analysis of new developments in other professions and allied health careers, projected population growth and employment opportunities, or the need for continuing education that the new technology mandates. As Dr. Carl has pointed out: "Community planning for nursing service and education can be accomplished only within the total plans for community health care."¹

The latest and most extensive effort on a national level to study the needs of nursing as well as its relationships with other professions within the health care delivery system has been that of the National Commission for the Study of Nursing and Nursing Education. The final report of the Commission (often referred to as the "Lysaught Report") notes that, "...the most difficult problem which confronts the nursing education system, and the students who choose to prepare for nursing, is the absence of articulation between the various components of the system."²

Although the concept of articulated nursing education is certainly controversial, its advocates argue that such a system is not only a way to attract students into the profession but an incentive to encourage nurses to remain active members of the nursing labor force. An educational system based on the concept of career mobility can offer nurses the possibility of advancement within their chosen profession and a chance to move up the ladder to positions of increasing responsibility in conjunction with greater status and pay. The Commission stood firmly behind the idea of articulated education while also maintaining that nursing education should continue its move from the traditional hospital school to colleges. It was recommended that their suggestions be implemented as follows:

To ensure that proper articulation does take place, our Commission urges each state to create a master planning committee that shall ensure nursing education is positioned in the mainstream of American educational patterns and provides a logical career ladder while maintaining concern for the quality and integrity of the institutions involved. This can, and must, and will be done. The growing pressures from the public, government at all levels, and the representative of concerned social blocs all stress the need for better career access.³

In Connecticut, eleven professional nursing organizations responded to the Commission's recommendation for coordinated planning and formed a Task Force to Plan and Reorganize Nursing Education and Nursing Service. Asked by the Commission for Higher Education (CHE) to serve as an advisory group to the CHE Resource Groups which were in the process of developing recommendations for a five-year statewide career plan for education, the Task Force broadened its representation to include the State Department of Education, Board of Examiners for Nursing, Commission

for Higher Education, Connecticut Hospital Association, Connecticut League for Nursing, Connecticut Licensed Practical Nurses Association, Connecticut Nurses Association, Connecticut State Medical Society, Deans and Directors Conference (CIN), Directors of Nursing Service Conference, Public Health Nursing (ACHSA), Regional Community Colleges Board.

The specific objectives of the Task Force and its representation are:

1) To identify, define and agree on recommendations to systematically reorganize nursing and nursing education; 2) To improve communication between and among nursing education and nursing service; 3) To support the implementation of the agreed upon recommendations; 4) To examine the relationship between nursing and other health professions and occupation; 5) To continuously evaluate and review the recommendations and changes made.⁴

In addition to participation in the Task Force the Connecticut State Department of Education, Division of Vocational Education, had been responding to national thrusts: 1) the emphasis of the U.S. Office of Education on career education for all students and; 2) the broadened scope of the Vocational Educational Amendment of 1968. In September 1971, the Department called a meeting of the Ad Hoc Committee to consider articulation of educational programs for nursing-related health occupations.

The Ad Hoc Committee reviewed the history and activities of the State Consulting Committee for Training in the Health Occupations and discussed recommendations of the Sub-Committee for the Improvement of Patient Care. A recommendation that the Department, in cooperation with the State Board of Examiners for Nursing and the Commission for Higher Education, provide for upward mobility of any individual from one occupational level to another was given priority. Specifically, a preliminary plan of action was being developed to consider the articulation of three nursing-related educational programs for which the State Department of Education had full or partial responsibility: Nursing Assistant, Practical Nurse and Associate-Degree Nurse. The Sub-Committee recommended a study to determine "the possibility of establishing at least one circumscribed pilot program to determine the feasibility of implementing and expediting the upward mobility of nurse aides prepared in established programs in our state to Licensed Practical Nurses and that of Licensed Practical Nurses to Registered Nurses.

On the basis of thoughtful discussion and planning the Sub-Committee's recommendation was activated by the Division of Vocational Education which contracted with the Connecticut Institute for Health Manpower Resources, Inc. (CIHMR) to undertake a 4-month study directed towards the preparation of a plan for articulation of nursing education.

The CIHMR study to develop a plan for articulation of educational programs for nursing-related occupations concerns itself with the three levels of nursing-related educational programs for which the State Department of Education, Division of Vocational Education shares responsibility as follows:

1. Nursing assistant programs in the comprehensive high schools
2. Practical nurse education programs (responsibility shared with the Board of Examiners for Nursing)
3. Community College Associate Degree Nursing programs (responsibility shared with the Commission for Higher Education, the Board of Examiners for Nursing, and professional accrediting bodies).

In addition to the stated objective of preparing a plan for articulation for the above-mentioned educational programs, the study concerns itself with arriving at recommendations to encourage the development of understandings and agreements among agencies and components of the State's public educational system concerned with the approval and operation of the involved programs. This second objective addresses itself to the fostering of a receptive environment for the implementation of recommendations pertaining to nursing education articulation among those persons and groups who might be responsible for implementing such recommendations.

Footnotes

- 1 Carl, Mary K., Ph.D., "Community Planning for Nursing and Nursing Education", Nursing Outlook, Vol. 20, No. 8, August 1972, p.507.
- 2 Lysaught, Jerome P., Ed.D., An Abstract for Action, McGraw-Hill Book Co., New York, 1970, p.114.
- 3 Ibid., p.114.
- 4 Quoted from minutes of The Connecticut Hospital Association, "Task Force to Plan and Reorganize Nursing Education and Nursing Service", November 17, 1972, 9:30 a.m., p.5.

SECTION TWO--METHODS

NOTE: Consultants were contacted for their knowledge and aid at various stages of the procedures outlined below. Complete listings of committee members, participating hospitals and extended care facilities appear in notes following SECTION TWO.

PART A: LITERATURE REVIEW

The literature regarding similar projects and dealing with relevant questions pertaining to nursing education and educational innovation was obtained and reviewed with attention to the scope of these projects, their methodology, evaluations and findings through the following procedures:

1. Bibliographies were provided by:
 - a. NERCOE--New England Resource Center for Occupational Education, Newton, Mass. (courtesy of Dr. Claire Reinhardt)
 - b. ACES--Area Cooperative Educational Services, Educational Resources Center, North Haven, Connecticut
 - c. University of Connecticut Health Center Library (courtesy of Acting Director, Charles Bandy)
2. Letters requesting additional information were sent to the authors of articles or program directors throughout the country. Follow-up phone calls were made when practical, and interviews were arranged in Connecticut and New York.
3. On the basis of the literature search, letters and phone calls, out-of-state consultants were invited from New York and Michigan to participate in workshops with Committee members.

PART B: LEGAL ASPECTS

The services of two legal consultants from the University of Connecticut School of Law were enlisted in the review and analysis of the legal restrictions in Connecticut pertaining to the duties of each of the three levels of nursing considered in the study. They were Rodney R. Jones, Attorney at Law and Lecturer; and Alice Simpson, Graduate Research Assistant. These consultants attended the study's open workshops (described below, SECTION TWO, Part E), and prepared a report on their research and analysis of findings as well as a series of recommendations (incorporated into SECTION FIVE of this report).

PART C: PROGRAM ANALYSIS

A Curriculum Committee (see Note 1 following SECTION TWO) was appointed to examine the behavioral objectives, curriculum content, and depth of the existing programs for the education of the three nursing levels considered and to determine the commonalities of the instructional curricula among the levels. Basic data were gathered by the staff of CIHMR in the following four areas:

1. The Nursing Assistant program offered in Connecticut public high schools.
2. The Licensed Practical Nurse program offered only in State Regional Vocational Technical Schools.

3. Associate Degree Nursing programs located in State public and private 2-year colleges.
4. Commonalities existing among the programs and models from other areas that could have possible relevance to Connecticut.

Basic information concerning the NA was supplied by the Connecticut State Department of Education in "Guidelines for Training Nurse Aides" (see Appendix). In addition, Institute staff received curriculum outlines from the Maloney High School Nursing Assistant Program and the Watertown High School Nursing Assistant Program. Telephone and personal interviews were held with nursing assistant instructors, hospital personnel, directors of nursing services, and staff development specialists.

Basic information concerning the LPN's education was furnished by the State Department of Education. Material included a set of course outlines for the LPN programs, a statement of philosophy of program, and curriculum objectives (see Appendix). Contacts were made by phone, in person, and by mail with Connecticut LPN directors, instructors, students, and the Connecticut Licensed Practical Nurses Association. Nine LPN instructors responded to written inquiries. National associations provided relevant articulation materials. Eight LPNs were interviewed.

Basic information concerning AD/RN programs in Connecticut was requested from the four existing AD programs, the Commission for Higher Education, and the Board of Trustees for Regional Community Colleges. One school sent a complete set of course outlines, others forwarded partial sets. Most courses did not have behavioral objectives spelled out as such in their programs. Interviews with directors of three existing AD/RN programs and the one planned for the fall of 1973 furnished information on curriculum content. Also, a compilation of progressive behavioral competencies for the associate degree nurse was prepared and provided by the New England Council for Higher Education in Nursing (NECHEN), an organization which includes among its members the Bridgeport, Quinnipiac and Norwalk Associate Degree programs. The NECHEN material was utilized for behavioral objectives data (see Appendix).

Contributions to the analysis of basic data for curriculum commonality were made by Professor Marguerite White, Associate Dean, University of Connecticut School of Nursing; Dr. Peter McNamara, Curriculum Specialist, New Haven Institute for Allied Health Careers; Diantha Fahey, RN, MSN, Nursing Consultant, Connecticut Hospital Association; Robert Maxwell, Director of Manpower Planning & Development, Assistant Vice President, Personnel, The Hartford Group.

PART D: JOB DESCRIPTIONS ANALYSIS

A Job Descriptions Committee (see Note 2 for listing of members) was appointed to obtain job descriptions appropriate for the three nursing levels from a variety of employing health facilities (including 35 general hospitals, the state hospital system, and a sample of at least 25 nursing homes in the state) and to analyze these descriptions in terms of their correlations with offered curricula in the extant educational programs.

I. On January 8, 1973, requests for nursing job descriptions were mailed to all 35 general short-term hospitals in Connecticut, 70 extended care facilities, and the State Health and Mental Health Departments. Due to a low return rate, additional requests were mailed and follow-up phone calls were made. Twenty-eight hospitals responded. The Connecticut Association of Extended Care Facilities

assisted in gathering the contracted number of job descriptions from the nursing homes. The CIHMR staff visited and contacted by phone approximately 40 health facilities. Final tabulations show job descriptions from 28 hospitals, 17 nursing homes, the Connecticut Health Department and the Connecticut Department of Mental Health. The total sample breaks down as follows:

| <u>ECFs and State Facilities Descriptions</u> | <u>General hospitals</u> | <u>Totals</u> |
|---|--------------------------|---------------|
| Nurse Aides | 19 | 28 |
| LPNs | 17 | 28 |
| RNs | 19 | 28 |

(For a complete listing of facilities responding to our requests for information, please see Note 3 following SECTION TWO).

II. The tabulation of job descriptions data described above generated two major problems. First of all, because of a complete lack of standardization among the descriptions received, it was difficult to make accurate comparisons or generalizations about programs; and secondly, the over-generalization and lack of standardization in the job descriptions presented an obstacle to the making of correlations between what the employed nurse at a given level is expected to know and do and the curriculum she is offered in her educational program.

These problems led CIHMR's staff to an examination of publications developed by the University of California, Los Angeles, Allied Health Professions Project. This project is a federally-funded curriculum research and development program, the objective of which is to create innovative instructional materials for allied health personnel, ranging from in-service and on-the-job training up through the community college Associate Degree. To meet this objective, the project has been concerned to develop task inventories for occupational analysis, which can serve as the basis for job descriptions, development of career ladders, establishment of job titles, and personnel assignments--all of which reflect the realities of today's health care personnel utilization.

The UCLA TASK LIST (see Appendix) was developed through the following procedures: a comprehensive functional list for nursing was compiled; this list was edited by a National Technical Advisory Committee of practitioners, physicians, educators and other experts; and the edited list was submitted in questionnaire form to those employed in nursing throughout the country to determine frequency of performance of tasks, supervision given or received, and difficulty of tasks. The information was processed by computer, the results were analyzed, and the findings were condensed into a factual report on occupational analysis.

III. The Connecticut tabulations were prepared in the following manner (see Appendix for tabulations):

a) The task list of 306 nursing tasks as prepared by the University of California Los Angeles study group was collapsed to 119 clearly identifiable task categories. This was done to reduce the number of tasks to functional sub-groups, the lesser number of which would allow for easier computation. Three meetings were held with nursing consultants (Mary B. Heath, RN, MA, Director of Nursing Education, Middlesex Memorial Hospital; Diantha Fahey, RN, MSN, Nursing Consultant, Connecticut Hospital Association) to reduce the original list to 119 tasks.

b) Job descriptions were analyzed and the various items in the descriptions were

matched against the task list. The information was transferred to coding sheets, transferred to punchboards, and processed on computer tape. The final tabulations were obtained from a computer run-off. Consultation regarding the use of the computer, as well as the actual computer facilities, were provided by Robert Gaffney of The Hartford Insurance Group. In addition, approximately 30 descriptions were processed manually from facilities which had sent their materials in late.

c) Curricula from the three levels were analyzed for match with 119 Task Inventory: for the NA, Guidelines from State Dept. of Education; for the LPN, set of course outlines from State Dept. of Education; for the AD-RN, composite of NECHEN material and four course outlines submitted by Connecticut programs.

IV. On the basis of this information, as well as Janice Danford's task analysis Workshop presentation (see PART E below), it was decided that a trial effort in task analysis would be made utilizing the UCLA list of 306 nursing tasks as the instrument for analyzing job descriptions and curriculum commonalities for the NA, LPN and RN nursing disciplines. The objective of this trial effort was to INDICATE THE COMPARITIVE EASE OF CONDUCTING A TASK ANALYSIS SURVEY WITHIN THE HEALTH CARE FACILITIES to more accurately determine the actual tasks performed by the NA, LPN and RN. This testing instrument could be offered to the employees on the job and could also be submitted to educators for curriculum information. Perhaps this sample will whet the appetite for a full-blown, carefully executed task analysis project.

Procedure of Trial Task Analysis:

Copies of the task list were distributed to nursing directors or nursing education coordinators of five different size and type facilities: Group I--Hartford and St. Raphael Hospitals; Group II--Middlesex Memorial Hospital; Group III--University-McCook Hospital; and the Avery Nursing Home in Hartford. These persons were asked to distribute a copy of the task list to one NA, one LPN, and one general-duty staff RN, and to instruct each person to check those tasks that she/he is required to perform. (The total sample included 5 NAs, 5 LPNs and 6 RNs--two RNs took part in the survey at Hartford Hospital). The task lists were also distributed to the nursing instructors at Maloney High School (for NA), to Windham Regional Vocational Technical School (for LPN), and to Mattatuck Community College (for AD-RN). The instructors were requested to check off tasks included in their curriculum and to offer suggestions for additional tasks.

This "quick and dirty" sample survey had obvious shortcomings for producing reliable data: small sample size, inadequate instructions to survey participants, lack of control. Several nursing educators felt additional tasks should be included for a more complete task list for Connecticut. Further, the sample included hospitals of varying size and type, and only one extended care facility. (This is inadequate extended care facility representation, considering that Connecticut has almost twice as many ECF as hospital beds). However, the objectives of this sample survey were met, in that it was thereby established that:

1. Check lists of tasks could be utilized easily within a health facility, once the aid of the nursing director or educational coordinator was enlisted.
2. Educational institutions will participate if given sufficient time.
3. Information gathered in this manner is amenable to coding comparative analysis, and comparison.

PART E: WORKSHOPS AND MEETINGS

I. Two open Workshops were held in different community facilities (college and hospital) for working Committees, invited guests and general interested public. Nursing, curriculum, and personnel consultants from New York and Michigan were principal speakers during the Workshops, and were participants in the smaller working committee sessions. We investigated task analysis, knowledges and skills, proficiency testing credit by examination, external degrees, self-instructions, learning modules, satellite high schools, secondary career centers, individualized "prescription"-type curriculum, computer-managed instruction (CMI), etc.

a) On Friday, March 23, 1973, a Workshop was held at Rensselaer Polytechnic Institute, Hartford. Guest speakers were:

Miss Janice Danford
Coordinator of Instructional Services
Capitol Area Career Center, Lansing, Michigan; and

Mrs. Mercedes Bierman
LEGS (Learning Experience Guides for Nursing Students)
John Wiley Publishers, New York.

Miss Danford discussed secondary school health curriculum, development of modular basis using task analysis techniques, systems analysis, performance prescriptions, and performance and behavioral objectives. Mrs. Bierman gave a multi-media demonstration of LEGS, a newly developed learning system for nursing students.

(NOTE: As a result of Jan Danford's presentation, The Hartford Insurance Group has engaged her services as a consultant for Management Development. Further, as a result of Mercedes Bierman's demonstration, a similar demonstration was held at Manchester Community College for representatives of several Connecticut community colleges. This effort indicates that there presently exists an atmosphere amenable to collaboration and sharing of resources among groups responsible for nursing education.)

b) On Tuesday, April 3, 1973, a Workshop was held at Hartford Hospital, Hartford. The guest speaker was:

Dr. Mildred Schmidt, Executive Director, State Board of Nursing
New York State Department of Education, Albany, New York.

Dr. Schmidt is a well-known and respected leader of nursing education innovations in our neighboring State of New York, and is credited with the development of the External Degree program for nursing.

II. The Curriculum and Job Descriptions Committees met separately and jointly a total of nine times. At one of the joint meetings of the Committees, a series of assumptions, (incorporated into the CONCLUSIONS of this report, SECTION FOUR) were discussed and accepted. These assumptions were also presented to the Ad Hoc Advisory Committee and approved by that group. Recommendations were made by the joint working Committees, presented for discussion to the Ad Hoc Advisory Committee of the State Department of Education, and are included in SECTION FIVE of this report.

III. The Interim Report of this study was prepared and distributed to the Ad Hoc Advisory Committee of the Division of Vocational Education, State Department of Education and was discussed at an April 30th meeting. Presentations were made by: Joseph Murphy, Associate Commissioner for Vocational Education; Claire Reinhardt, Health Occupations Consultant; Selma Lee Markowitz, Project Director and Executive Director, CIHMR; Marguerite White, Chairperson, Curriculum Committee; Robert Gronbach, Chairperson, Job Descriptions Committee; Alice Simpson, Legal Research Consultant; Robert Maxwell, originator of the "Maxwell Model" for the joint study Committees, Manpower Development Director, The Hartford Insurance Group.

IV. The recommendations incorporated into SECTION FIVE of this report were presented to the Board of Governors of the Connecticut Institute for Health Manpower Resources, Inc. at a meeting held on Tuesday, May 22, 1973; the recommendations were at that time approved by the Board.

Curriculum Committee

Marguerite White, RN Ed.D,
Committee Chairperson
Associate Dean, School of Nursing
University of Connecticut

Ruth Abbott, RN, MS,
Executive Director
Visiting Nurse Association of Hartford

Frank R. Corkin, Jr., President
Connecticut Hospital Personnel
Association

Mary Emerson, RN, MA, Coordinator
of Staff Development in Nursing
Hartford Hospital

Diantha Fahey, RN, MSN, Director
of Patient Care Services
Connecticut Hospital Association

Robert H. Fenn, PhD
Dean of Faculty
Manchester Community College

Mary Islieb, RN, MEd., Director
of Allied Health Programs Division
Director of Nursing Education Programs
Mattatuck Community College

Debra Katz, RN
Hartford Chapter, American Red Cross

John McGavack, Jr., MS
Superintendent of Schools
Madison Board of Education

Peter McNamara, PhD
Program Developer
New Haven Institute of Allied Health, Inc.

Sophie Schmidt, RN
Homemakers - Upjohn

Helen Shoneck, LPN
Connecticut Licensed Practical
Nurses Association

Florence Walker, LPN
Connecticut Licensed Practical
Nurses Association

Resource Persons (Curriculum Committee)

Marie Lascoe, PhD, Professor,
Vocational, Technical Education
Central Connecticut State College

Ann McGuigan, RN, BS, MA
Chief Nursing Examiner

Joseph F. Murphy, Associate Commissioner
and Director
Division of Vocational Education
State Dept. of Education

Claire Reinhardt, PhD
Health Occupations Consultant
State Dept. of Education, Vocational Div.

Lillian Warner, RN
Board of Nursing Examiners
Windham Regional Vocational Tech. School

CIHMR Representatives

Senator Lucy T. Hammer, President
Selma Lee Markowitz, MPH, Executive Director
Marilyn Pet, MA, Program Associate

Advisory Committee

Ruth Abbott
Visiting Nurse Association of Hartford

Barbara Donahoe
Nurses Task Force

Jean Bowen
Connecticut Nurses Association

Diantha Fahey
Connecticut Hospital Association

Job Descriptions Committee

Robert C. Gronbach, Committee Chairperson
Assistant Director and Director of Employee Relations
Hartford Hospital

Francis P. Dellafera, President
Connecticut Association of Extended Care Facilities

Mary Heath, RN, MA
Director of Nursing Education, Ona M. Wilcox School of Nursing
of the Middlesex Memorial Hospital

Judith Hriceniak, RN, BS, MA
Coordinator Home Care Program
Coordinator and Instructor in Prepared Childbirth
and Family Planning
Assistant Division of Education
Bristol Hospital

Joseph T. Gaffney, Assistant Secretary
Market Research
The Hartford Insurance Group

Sister Maria Lawrence, RN, MA
Coordinator of the LPN School
St. Raphael's Hospital

Lucian Lombardi, Director
State Technical Colleges
Board of Trustees for State Technical Colleges

Robert Maxwell, Assistant Vice President, Personnel
Director of Manpower Planning and Development
The Hartford Insurance Group

CIHMR Representation

Ronald S. Beckett, MD
Evarists Berzins, Health Planner
Senator Lucy T. Hammer, President
Selma Lee Markowitz, Executive Director
Angelo Mastrangelo, MD, Treasurer

LIST OF INSTITUTIONS SUBMITTING JOB DESCRIPTIONS TO CIHR

HOSPITALS

- 1) Hartford Hospital
- 2) Middlesex Memorial Hospital
- 3) Bristol Hospital
- 4) William Backus Hospital
- 5) Norwalk Hospital
- 6) Griffin Hospital
- 7) St. Francis Hospital
- 8) Stamford Hospital
- 9) McCook Hospital
- 10) Windham Hospital
- 11) Rockville General Hospital
- 12) Meriden-Wallingford Hospital
- 13) Manchester Memorial Hospital
- 14) Yale-New Haven Hospital
- 15) Park City Hospital
- 16) Day Kimbal Hospital
- 17) Lawrence & Memorial Hospital
- 18) Charlotte Hugnerford Hospital
- 19) Bradley Memorial Hospital
- 20) New Britain General Hospital
- 21) Waterbury Hospital
- 22) Hospital of St. Raphael
- 23) Greenwich Hospital
- 24) WW II Veterans Memorial Hospital
- 25) Danbury Hospital
- 26) St. Vincent's Hospital
- 27) Mount Sinai Hospital
- 28) Newington Children's Hospital

EXTENDED CARE FACILITIES

- 1) Montowese Conv. Home
- 2) Masonic Home and Hospital
- 3) Pond Point Extended Care Facility
- 4) Enfield Nursing Home
- 5) Westfield Conv. Hospital
- 6) Mary Elizabeth Conv. Hospital
- 7) Prospect Gardens Conv. Home
- 8) Norwichtown Conv. Home
- 9) Greenwich-Laurelton Conv. Home
- 10) St. Mary Home
- 11) Meriden Conv. Home
- 12) Wallingford Conv. Hospital
- 13) Summit Conv. Hospital
- 14) Unknown (tabulated)
- 15) Unknown (tabulated)
- 16) Unknown (coded)
- 17) Beechwood Manor

State Health Department Facilities

State Mental Health Department Facilities

Note: A uniform job description, as required by civil service regulations, is used for the several facilities at both Health and Mental Health Departments.

In accordance with the definition commonly used by the American Hospital Association, the in-patient facilities of both departments are considered long-term health care institutions and, therefore, were included in the extended care facility group.

SECTION THREE--FINDINGS

PART A: REVIEW OF LITERATURE

I. INTRODUCTION

The issue of educational articulation centers around the fact that traditionally there has been no academic credit granted to a student moving from one program to another. For the practical nurse, whether she chooses an associate degree, diploma, or baccalaureate degree program, this has meant starting from the beginning with new students. Her previous training and clinical experience may not only be refused credit but her instructors may feel that she will have to "unlearn" some of her accumulated knowledge. What exactly she is supposed to "unlearn" remains rather unclear unless one might be concerned with problems of new self-concept or role definition as she moves into a position of greater responsibility. Mildred Katzell believes that this concept is no longer valid:

It used to be that directors believed that aides had learned many wrong things, and that the school of nursing had to assist the student to un-learn those things before beginning the nursing education process. One of the reasons for a change in attitude about that belief may have been the discovery that students who come into nursing with previous experience have more realistic expectations than those without such experience. It has been rather clearly demonstrated that realistic expectations are related to retention in the nursing program. Also, the applicant who has already worked as an aide or a practical nurse has an assured level of motivation toward a career in nursing when she or he seeks admission to the program.

A system which mandates starting at the beginning of every new program can be perceived as presenting necessary obstacles to those who want to continue their education, because it can involve a great deal of lost time and additional expense for the student.

While the advisability of encouraging a coordinated system of articulation in nursing education is a much debated issue, the actual controversy does not deny the underlying assumption that self-realization and individual fulfillment is a desirable goal for everyone. There exists, however, genuine concern that facilitating the progression from one level of nursing upward to another is no guarantee of increased satisfaction with one's self or career. In fact, the emphasis on career mobility may be interpreted as a negative trend. Mildred Montag, a pioneer in the development of the original associate degree programs, states that the current emphasis on upward mobility is a form of snobbery which is degrading to the lower level worker.

The ladder concept, in my opinion, seems to deny the integrity of professions themselves and the varying kinds of practice within an occupation...The notion of dead end seems to deny dignity and worth to those who make a career of their original line of work.²

Recognizing that some individuals may have no apparent desire to move from one career level to another she urges that lower level careers be given due respect and that attention be given to the initial counseling process so that a student is aware of his opportunities before committing himself to a career choice.

Sister Anne Joachim Moore argues that the whole is greater than the sum of its parts, a concept which she feels is denied by an articulated program. Stating that advancement in nursing requires not only the accumulation of additional knowledge, but a new synthesis of old knowledge, she implies that the present approach to a ladder system does not allow for this reorganization of concepts.

In addition, she criticizes the idea of core curriculum which she perceives as forcing students into unnecessary courses on the assumption that they may change their major field of study. She cites a hypothetical example of a medical record technician required to study chemistry in a core curriculum but does not draw such examples from any specific programs.³

The underlying assumption of both Moore and Montag is that one should simply start off in the right program to begin with and expect to be set back if career plans change and goals are set higher. But what happens to the students who has not received adequate counseling and finds he wants to move upward in his profession? What opportunities are available for those highly motivated students or employees who want to advance in their profession but are held back by perceived educational barriers?

Bonnie Bullough feels that today's nursing problems stem from yesterday's lack of planning. The stratification of nursing roles over the past thirty years gradually necessitated the development of new educational programs in a different setting - the two and four year colleges. Because nurse educators had a difficult time earning acceptance in the academic world they now tend to be overly defensive about defining standards and intellectual content of their programs. This defensiveness has led to a rigid separation of the technical and professional nurse.⁴

In discussing the need for career mobility, J. Warren Perry concludes that dead-end jobs lead to a lack of job satisfaction, material rewards, motivation and initiative. An integral part of developing satisfactory solutions to the problem of frustration on the job is a thorough job task analysis for each level so that a meaningful job description can successfully be coordinated with curriculum development. The distinction between various levels of nursing seems to be clearer in the academic world than the actual job setting.

It is the achieving of a balance between the educational preparation and job responsibilities that makes the professional person and his job performance more effective. Any imbalance in over-education or under-education can inevitably lead to dissatisfaction and frustration.⁵

In considering articulated nursing education throughout the country, it should be noted that previously important differences existed between Connecticut and other states. As will be seen, some community college programs offer training for the NA, LPN and AD/RN, but without legislative change this approach would not have been possible in this state. Public acts have since been passed by the Connecticut State Legislature allowing for greater flexibility in location of nursing educational programs.

Presently, the State Department of Education, along with the Board of Examiners for Nursing and the Commission for Higher Education, has full or partial responsibility for programs for the education of the NA, LPN and AD/RN. These three types of program have always in the past been offered in separate educational facilities; have had different entrance requirements; and varied in length of training, qualifying their graduates for three distinct levels of nursing. Neither the NA nor LPN student earned college credits in these programs; this is an important consideration in the case of the student planning to seek advanced training in an associate degree or baccalaureate degree nursing program.

Advocates of an educational system providing orderly transfer between programs with a minimum of lost time, duplication of course work, or expense, are facing problems common to educators in all fields. The issues of independent study, work-study programs, credit by examination, and transferability of credit between institutions are certainly not limited to the nursing profession, but the nature of nursing education is fostering some decidedly unique solutions.

The literature is replete with articles debating the advisability of career ladders, vertical and horizontal career mobility, advanced placement, credit-by-examination, upgrading and work-study approaches, and articulated programs. Even those who feel strongly that the present system of nursing education must be more flexible in recognizing the achievements of students with previous work experience and/or education, the debate begins anew when questions of implementation are raised. The following listing of articulated programs will show by its diversity that no program is necessarily the one and only solution to the need for innovative approaches. Each state must consider its own manpower needs and resources; the number, type and location of current programs and clinical facilities; its financial ability to expand or close down programs.

Nonetheless, an apparent surplus of any level of nursing personnel should not prevent efforts to revise the education system. The issue is not just one of supply-and-demand, but also the development of an educational system allowing for orderly progression from one level to another. Expansion or contraction of enrollment in any one segment should be planned in coordination with projected manpower needs in a given area.

Footnotes

- ¹ Katzell, Mildred E., "Upward Mobility in Nursing", Nursing Outlook, Vol. 18, Sept. 1970, p. 37.

- 2 Montag, Mildred, "Debate: Ladder Concept in Nursing Education", Nursing Outlook, Vol 19, No. 11, Nov. 1971, p. 729.
- 3 Moore, Sister Anne Joachim, "The Ladder and the Lattice", Nursing Outlook, Vol. 20, No. 5, May 1972, pp. 330-32.
- 4 Bullough, Bonnie, "You Can't Get There From Here", Journal of Nursing Education, Nov. 1972, pp. 4-10.
- 5 Perry, J. Warren, "Career Mobility in Allied Health Education", Journal of the American Medical Association, Vol. 210, No. 1, Oct. 1969, p. 108.

II. OPEN AND CORE CURRICULUM--ARTICULATED PROGRAMS

Having officially supported the concept of open curriculum, the National League for Nursing (NLN) is currently engaged in a study of open curriculum programs throughout the country. In an interview, Dr. Carrie Lenburg and Dr. Lucy Kelly, NLN, Division of Research, explained that questionnaires have been sent to open curriculum programs throughout the country asking for cooperation in a long-range study and the NLN is still in the process of selecting schools. The purpose of the study is to clarify the open curriculum concept and to assist schools in utilizing tests and other measuring instruments for placement of students with previous experience in the health field. A listing of open-curriculum programs is being prepared for students' use.

A core curriculum system combines students from separate but related health disciplines in courses giving basic, essential knowledge for each program. For example, biology and chemistry are required subjects for many different areas and it is more economical for a school to have students from related health areas attend certain classes together. A good background in core courses, with exposure to different allied health fields, gives the student a chance to consider and choose from several areas of interest before committing himself to a specific program. Answering those opposed to core curriculum, Oliver H. Duggins states:

If a core curriculum refers to a monolithic ladder-like structure that reduces the skills of the various groups to a series of tasks arranged by systems organizers in terms of complexity without reference to human differences and to the quality of interaction, then...I am unqualifiedly opposed to such a scheme...If, on the other hand, the core curriculum refers to a sequence of courses common to a number of related career programs, making it possible for a student to move from one level or career to another with a minimum of lost time and without having to duplicate related courses, and at the same time effect a financial saving, then this procedure would seem to be wholly acceptable. ²

A listing of various articulated educational programs throughout the country, utilizing both open and core curriculum, is presented below. Anyone interested in more detailed information about any particular program is advised to refer to the publication cited.

1. Maricopa Technical College (Phoenix, Arizona)

On the basis of student and community requests, the college expanded its program from Nursing Assistant and ADN to include Practical Nursing. A Health Core Program was developed and the curriculum follows:

Semester I: 18 hours in English, Psychology, Health Core I, II, III, and Nursing. Upon completion, student qualified as Nursing Assistant.

Semester II: 18 hours in Child Growth and Development, Speech, Humanities Elective, Pharmacology, Obstetrics Nursing, Community Health, Med-Surg Nursing. Upon completion student eligible to take Arizona licensure exam for practical nurses.

Semester III: 16 hours in English or Technical Writing, Human Anatomy and Physiology, Obstetric Nursing II, Psychiatric Nursing.

Collins, Betty, "An Experiment in Open Curriculum", Associate Degree Education--
Current Issues, 1972, National League for Nursing, New York, 1972,
pp. 25-27.

Mannion, Shirley E., "Upgrading LPNs to RNs", The Journal of Practical Nursing,
Vol. 19, No. 9, September, 1969, pp. 31, 32, 47.

2. Central Arizona College (Coolidge, Arizona)

The program was designed for rural community whose low educational and economic standing lead to problems in attracting qualified personnel and instructors. Open admission and open curriculum policy was designed to let students enter, leave, re-enter without loss of credit, as many students worked part or full-time while in school.

Semester I: 14 hours in Nursing Process, Anatomy and Physiology, Growth and Development. Upon completion student qualified as Nurse Aide.

Semester II: 18 hours in Nursing Process, Anatomy and Physiology, Chemistry, Sociology, Physical Education. Upon completion student eligible to take state licensing exam for Practical Nurses.

Semester III: 13 hours in Nursing Process, English, Psychology, Humanities Elective, and Physical Education.

Semester IV: 16 hours in Nursing Process, Microbiology, English, Physical Education. Upon completion student eligible to take state licensing exam for Registered Nurses.

All nursing subjects are introduced in the first semester and become more complex each semester. Emphasis is placed on Pharmacology during the second semester because the LPN is the primary medicine nurse in the area.

Powers, Bonnie, "An Experiment in Open Curriculum", Associate Degree Education -
Current Issues, 1972, National League for Nursing, New York, 1972,
pp. 12-16

Powers, Bonnie, Curriculum Project, Nursing Program, Level I, II, III, Central Arizona College, Coolidge, Arizona, 3 Volumes, no date of publication given.

3. Long Beach City College (California)

At request of community, college established a program for home health aides in addition to existing LVN and ADN programs. Curriculum was designed to prepare aides to function in home or hospital. The LVN curriculum was restructured so that aides who completed the 6 week program could enter the LVN program with credit. The faculty worked with the Life Sciences Department to determine commonalities in LVN, ADN courses and the ADN curriculum is being restructured so first year similar to ADN. At end of two semesters qualified students may continue in ADN program or take the

summer course required for completion of LVN program. LVN graduates from other programs (accredited) may receive credit-by-examination in the ADN program.

Drage, Martha O., "Core Courses and a Career Ladder", American Journal of Nursing, Vol. 71, No. 7, July 1971, pp. 1356-358.

4. Cuyahoga Community College (Cleveland, Ohio)

Established in 1963, Cuyahoga Community College began an ADN program in 1964. In 1967 it was decided by the Board of Trustees to develop a system of credit-by-examination for LPNs admitted to the ADN program. Basic guidelines were developed: students must petition academic dean, get approval of Department and College, may not earn more than 12 hours of credit in this manner, (maximum of 5 credit hours in nursing major), must have "C" grade average or better, must complete prerequisite science courses. The applicant must also be an LPN graduate of a state-approved school of practical nursing.

Students are given special preparation in the area of psychiatric nursing before taking the midterm and final exams from Nursing 101 (Fundamentals of Nursing). Successful completion of these exams leads to 5 hours of credit in the nursing major and the transcript indicates how the credits were earned.

Burnside, Helen, "Practical Nurses Become Associate Degree Graduates", Reprint from Nursing Outlook, Vol. 17, No. 4, April 1969 (distributed by NLN)

5. Penn Valley Community College (Kansas City, Missouri)

On an experimental basis the college has revised its ADN curriculum to incorporate the career ladder concept. In the pilot curriculum scheduled to begin in the Fall of 1971, the first year courses would include the minimum requirements to become eligible for the licensure exam for Practical Nurses. Completion of the second year would qualify graduates to sit for the exam for Registered Nurses. The basic philosophy of the program is that all nursing care should be comprehensive and that differences among the levels of nursing care is a matter of depth and scope. The curriculum is designed to teach basic skills during the first year, adding depth of knowledge in the second year.

Penn Valley Community College, Department of Nursing Education, Two-page outline summarizing program, no date of publication given.

6. Bucks County - Grand View Diploma Nursing Program (Sellersville, Pennsylvania)

This is a one-year program to upgrade LPNs to RNs utilizing non-traditional teaching methods which allow for maximum individualized instruction. Developed and sponsored by the Bucks County Public Schools (Intermediate Unit #22) and Grand View Hospital the program represents a cooperative effort by a public and private agency.

All social and natural sciences courses are taught by the Minnesota Video Nursing Education Series and nursing courses utilize LEGS (Learning Experience Guides). By pre-testing each student with standardized achieve-

ment tests in science and nursing courses, individual weaknesses are noted. Each student works with the faculty to tailor a learning program, suited to her needs, and a schedule which provides for regular evaluation by herself and the faculty. Classes meet five days a week, 8:00 A.M. - 4:00 P.M., for one year which is divided into four terms of twelve weeks class and one week vacation.

"Bucks County-Grand View Diploma Nursing Program", Brochure published by Grand View Hospital and Bucks County Public School Intermediate Unit #22, Sellersville, Pa., no publication date given.

7. Cabrillo College (Aptos, California)

The first class in the newly articulated LVN-ADN program will consist of 35 new students and 15 LVNs. The initial LVN group will not receive any advanced placement but will be studied so that criteria for future LVN students can be established. The first group of LVNs will have fewer nursing clinical laboratory requirements in the first year, though. All students will be required to meet the 31 general education units requirements and new students will have to meet the 34 nursing course units. It is anticipated that LVN students will eventually not have to take the full 34 units in nursing when criteria have been established and special counseling will be provided for LVNs with educational, social or financial problems.

"The reality of the differing individual circumstances of licensed vocational nurse applicants to an associate degree nursing program dictates that this project be approached with the obligation of striving to meet the individual needs of each licensed vocational nurse applicant rather than of establishing yet another closed educational system in an abbreviated curricular package." (p. 47)

Ogden, Gordon L., "Upward Mobility of Licensed Vocational Nurses - Innovations in Nursing Education Must Come From Within the Profession", Junior College Journal, Vol. 50, April 1970, pp. 45-47.

8. Northeastern University College of Nursing (Boston, Massachusetts)

While the program for regular ADN students at Northeastern is a three-year program a pilot curriculum has been developed for LPN transfer students, shortening the program to two years. LPNs join ADN students from the beginning of the program but are exempted from the nursing course for the first three quarters. During that period they are required to take three courses providing an orientation to technical nursing while their clinical lab practice for the first two quarters serves as a qualifying exam for that section. They are also allowed to take faculty constructed, written qualifying exams which, if passed, will give the student 29 quarter hour credits in nursing.

Kane, Mary P.A., Director of Pilot Project, "Credit Allotment for Selected LPNs Who Transfer to an Associate Degree Program in Nursing", Brochure published by Northeastern University, Boston, Mass., no publication date given.

9. Miami-Dade Junior College (Miami, Florida)

A letter from Denise Hahn, Chairman, Department of Nursing Education at Miami-Dade Junior College, indicated that they were not yet prepared to share the detailed program information which had been requested. A special curriculum has been designed for LPNs who are admitted to the Pilot Transitional Program (LPN-RN) offered by the college. In order to qualify for admission to the program the student must: be licensed by the State of Florida; have completed prerequisites in English and Psychology; and have earned a grade of "C" or better in challenge exams for Nursing I and Nursing I Lab (offered in the first semester of the regular ADN program). An LPN in the transitional program can earn an AAS degree in one calendar year (divided into four terms, including a summer session). An LPN who passes the challenge exams but is not admitted to the Transitional Program can move directly into sequential nursing courses.

"Transitional Program, L.P.N. - R.N.", Information sheet submitted by Denise Hahn, Chairman, Department of Nursing Education, Miami-Dade Junior College, no date of publication given.

10. State University of New York Agricultural and Technical College (Farmingdale, New York)

This is a part-time evening program for students interested in becoming ADNs. The entire program can be taken at night and completed with a period of four to ten academic years on a part-time basis. Graduates of the program are eligible to sit for the New York State licensing exam for registered nurses. The students come from various backgrounds including work experience as secretaries, telephone operators, airline stewardesses, policemen, firemen, LPNs and nurse aides. With an open admission policy either a high school diploma or its equivalent are required.

O'Neill, Grace J. and Steinbaum, Barbara H., "Part-Time Evening Nursing Program" Nursing Outlook, Vol. 20, No. 2, February 1972, pp. 124-25.

11. Ferris State College (Big Rapids, Michigan)

Like other programs mentioned above Ferris State College has designed its curriculum to qualify first year graduates to sit for the licensing exam for practical nurses. In the belief that no educational program should be terminal the faculty devised a program in which occupational (skill) education is offered first, followed in the second year by additional theory and education. Students may drop out at the end of the first year with a salable skill and return to the program at a future date. Graduates of other practical nurse programs must meet certain criteria in order to be admitted directly to the second year of the ADN program: licensed or eligible for license in Michigan; ranked in upper third of practical nurse program and Michigan scores on the licensing exam; have worked as an LPN for at least one year; be able to provide good references from employers.

"A nursing ladder with an assist to second and third levels does not imply that everyone should aspire to climb. If the ladder makes any sense at all

it does so because it offers opportunities to drop off the ladder with a salable skill at whatever level is appropriate to the abilities of the individual...It will not bring about the demise of practical nursing. (p. 48)

Sherrrod, Esther R., "Bottom-Side Up in Nursing Education", The Journal of Practical Nursing, Vol. XXI, No. 6, June 1970, pp. 25, 48.

Footnotes

- 1 Interview with Dr. Carrie Lenburg and Dr. Lucy Kelley, Division of Research, National League for Nursing, New York, New York, February 1, 1973.
- 2 Duggins, Oliver H., "The Development of Health Core Areas: 'Development of the Concept'", National League for Nursing, Council of Associate Degree Programs, Annual Meeting, March 1971, Washington, D.C., distributed by the NLN, New York, p. 2.

III. WORK-STUDY PROGRAMS

Even a completely articulated system granting maximum credits for previous education is not always feasible for nursing personnel desiring upward mobility. Lacking the economic resources to stop working and attend school, even for a minimal amount of time, many highly motivated employees are prevented from seeking additional education. One solution to this problem is a work-study program which allows a student to divide his time between class and career responsibilities. Several different programs are presented here and they fall into one of two major categories: 1) the student works part-time while attending school but receives the equivalent of a full-time salary and; 2) the student is paid for the actual number of hours worked, whether full or part-time, and attends school at hours which do not conflict with the working schedule.

1. District Council 37, American Federation of State, County and Municipal Employees, AFL-CIO

Sponsored by the Department of Hospitals and District Council 37 an experimental 3 year program was designed to upgrade nurse aides to LPNs in a 14 month work-study program. Federal grants totaling \$2,610,313 were received from the U.S. Department of Labor, Manpower Administration and the U.S. Department of Health, Education and Welfare. Screening procedures were used to select students for the three classes from over 2800 applicants but it was later found that "None of the traditional methods of selecting candidates for an LPN course predicted the success or failure of the nurse's aides on the end of course or the state licensing examination nor did they predict final class standing." (p. 8, Final Report) The aides worked 20 hours per week and attended classes for another 25 hours per week. Because of scheduling problems some aides worked and/or attended classes 7 days a week for 14 months. Training stipends allowed the aides to receive the equivalent of a full-time salary, with some exceptions. Remedial work, tutoring and counseling were provided. Of the 422 graduates of the program, 91% passed the state licensing exam and returned to work as LPNs. (Some students are now continuing their education as RNs).

In an interview with Florence S. Stern, Project Director; Lillian Roberts, Associate Director, District Council 37; and Dr. Sumner Rosen the continuation of the program beyond the initial demonstration phase was discussed. Because the program was so successful District Council 37 was able to implement changes. The curriculum has been revised to include recognition of the aides previous work experience; the program has been shortened to eight and one-half months; and the students now attend classes on a full-time basis during that period.

"Upgrading Nurse's Aides to LPNs Through a Work-Study Program" - Stern, Florence S., Director and Project Staff under Title 1 (E&D) funds. Sponsored by: District Council 37, AFSCME, AFL-CIO; and Health Services Administration, Departments of Hospitals and Nursing Education and Nursing Service. Funded by: U.S. Dept. of Labor, Manpower Administration, and Office of Education, U.S. Dept. of Health, Education and Welfare. Final Report.

Bumstead, Richard A., "Nurse Aides Make Upgrading Work", Manpower, Vol. 3, No. 3, March 1971, pp. 8-13.

Engel, Joyce, "Nurse's Aide to LPN Upgrading Program", The Journal of Practical Nursing, Vol. 20, May 1970, pp. 26-30.

Interview with Florence S. Stern, Lillian Roberts, Dr. Sumner Rosen, at District Council 37 office, New York, February 1, 1973. Interviewed by S. L. Markowitz, D. Owens, and M. Pet.

2. Hunter College Municipal Nursing Program

In response to the critical shortage of registered nurses in the New York City municipal hospital system, Hunter College of the City University of New York, the New York City Health Services Administration and the New York City Department of Personnel began an experimental 3 year work-study program to prepare LPNs for Professional Nursing. Funding was received from the U.S. Department of Health, Education and Welfare, Division of Nursing.

The Hunter College program was similar to the District Council 37 program in many respects: applicants had to have worked for the municipal hospital system for at least one year; students worked 20 hours per week and attended classes 25 hours per week; counseling (but not remedial courses) was provided; and a small number of students (75) had to be selected from over 2,000 applicants. The accelerated curriculum, specifically designed for LPNs, did not include fundamentals of nursing and greater emphasis was placed on theory than on clinical skills. Pharmacology was not offered as a separate course but incorporated into other classes and nursing seminars.

Three classes of 25 students each attended a trimester program for 17 months, and graduated in November of 1970, 1971, and 1972. All 50 graduates of the first two classes are currently licensed as registered nurses. According to Pearl Papasian, Project Director, many more students could have successfully completed the program if given the opportunity, and it was hoped that the success of this demonstration project would encourage other schools and hospitals to initiate similar efforts.

Interview with Pearl Papasian, Project Director, Hunter College Municipal Nursing Program, and Dean Holmes, Hunter College-Bellevue School of Nursing at Hunter College-Bellevue School of Nursing Office, February 1, 1973. Interviewed by S. L. Markowitz, D. Owens, M. Pet.

3. The Hospital League/Local 1199 Training and Upgrading Fund

Established in 1968 the Training and Upgrading Fund is a cooperative venture between Local 1199 and the League of Voluntary Hospitals and Nursing Homes, New York City. Cooperating institutions pay 1% of the payroll total to the Training Fund which is used to sponsor continuous remedial and upgrading programs for union members. Any applicant is eligible if he or she has belonged to the union for at least one year, and his hospital contributes to the Fund. The union provides individual counseling and tutoring; a 20 week program to prepare students for the high school equivalency exam, if necessary; and a 20 week remedial program to help students brush up on reading, mathematics and science skills. When the student is prepared to enter a training program, the staff helps him find the appropriate school, usually a community college, and the student takes a leave of absence during his training but continues to receive a weekly stipend of 80% of his net pay. Nurse aides participating in this program are studying to become LPNs.

Members in Training for Better Jobs and Pay, Reprint from 1199 News, National Union Edition, March 1972.

Aisen, May W., "Up the Vocational Stairs", American Journal of Nursing, Vol. 70, December 1970, pp. 2614-617.

4. Hospital Career Development Program

Utilizing the expertise of the Economic and Manpower Corporation, New York, hospitals in Boston, Cleveland, and Maryland joined together with representatives from the American Federation of State, County and Municipal Employees to design career ladders for hospital employees. Career ladders were planned on the basis of: hospital organizational charts, policy statements, regulations, guidelines for hiring and promoting employees; interviews with supervisory and line personnel, job observation, task analyses, and development of a complexity rating for each task based on required responsibility and length of training, instruments and equipment used, and amount of patient contact.

Curriculum suited to the needs of each institution was developed and training guides were prepared for instructors. The program was constructed so that students were presented with necessary remedial work, skill training in the classroom setting, and on-the-job training. Trainees for the program were selected on the basis of seniority, job performance record, and proximity to the poverty level. Although this program did not upgrade nurse aides to LPNs it did develop stratification within the aide system so that greater responsibility could be given to senior aides.

"Hospital Career Development, Final Report", Prepared by: The Economic and Manpower Corporation, New York; Submitted by: AFSCME, Washington, D.C.; Funded by: U.S. Dept. of Health Education and Welfare, Office of Education, U.S. Dept. of Labor, Manpower Administration; Grant # OEC 0-9-18006-2773 (336), December 1970.

5. Multiple-Track Nursing Sequence

The Sequence was designed by Eleanor Gilpatrick as part of the Health Services Mobility Study sponsored by the Research Foundation of the City University of New York. Prepared for New York City, the basic plan is not limited to one area and is applicable to other cities or states. In her plan for nurse aides and LPNs entering a community college ADN program, Dr. Gilpatrick has devised a system whereby a student can work half-time and take a 20 hour program at school. (To qualify as a full-time student one must take a minimum of 12 credits per semester, involving no more than 20 hours per week according to Gilpatrick) In one calendar year (3 trimesters or 2 semesters plus summer school) an aide can earn the 33 credits which qualify her to sit for the licensing exam for practical nursing, provided the courses are approved by the State Department of Education in Albany. The aide can then return to work as an LPN or follow the same schedule for another year until she earns her associate degree (66 credit hours required).

An LPN entering the same program can take the College Proficiency Exam Program's tests in Fundamentals of Nursing, and Maternal and Child Care. Successful completion of these exams will earn her 9 to 16 credits, depending upon the program. She then needs to earn an additional 50-57 credits to complete the requirements for an AAS degree, at which time she may take the RN exam.

In the meantime, one full-time aide can cover the 40 hours a week spent in class by two part-time aides, at no additional expense to the employer. The working hours of replacements have to be carefully coordinated with those of students in the combined work-study program, of course, but it can be done.

A similar track is outlined for upgrading nurse aides who do not wish to

attend a community college. These aides would attend a practical nurse program especially designed to meet the needs of part-time students. The advantage to the employer is that he is upgrading his own employees at no extra expense, and encouraging a promotion system which will simultaneously attract highly motivated employees.

Gilpatrick, Eleanor, "Supplement to Research Report No. 1, A Multiple Nursing Sequence", Health Services Mobility Study. Sponsored by: Research Foundation of City University of New York, no date of publication given.

6. Part-Time Program for LPNs

Rachel Winer, Massachusetts State Department of Education, Division of Vocational Education, Office of Health Occupations, stated in a telephone interview that the State was sponsoring a tuition-free, two-year practical nurse program. Classes will be offered three nights a week from 5:30 P.M. to 10:00 P.M., thereby allowing students to work during the day. The Department has already received over 500 applications for 25 openings in the program.

A letter has been sent to the Program Director requesting additional information.

Telephone interview with Rachel Winer, Mass. State Dept. of Education, Division of Vocational Education, Office of Health Occupations, March 1973.
Interviewed by D. Owens

7. California Equivalency Program

The California Licensure Law for Vocational Nurses requires applicants for licensure to have completed an accredited course in vocational nursing or to present evidence of equivalent education and experience. Since evaluation of "equivalent education and experience" proved to be difficult the Board of Vocational Nurse and Psychiatric Technician Examiners developed rules for an Equivalency Program, requiring less classwork than a regular accredited program and a minimum of three years of paid nursing experience in specified clinical areas. Although administrative problems are noted, particularly in verifying work experience, the program can be taken on a part-time basis, thereby providing an opportunity for persons to continue working while becoming eligible for licensure.

Wood, Maryellen, "Upgrading Nurses' Aides to LPN/LVNs", The Journal of Practical Nursing, Vol. XIX, No. 9, September 1969, pp. 27, 48.

IV. CREDIT BY EXAMINATION

Proficiency tests or challenge examinations have been used in American colleges and universities for over a century in this country. The College Board has been offering Advanced Placement (AP) examinations since the mid-1950's, and, more recently, has been making college credit by examination available nationally through the College-Level Examination Program (CLEP). A fully articulated system of nursing education calls for the implementation of procedures for the granting of credit by examination for this field.

1. Western Interstate Commission for Higher Education (WICHE) - Western Regional Conference, 1972

In a conference sponsored by WICHE and the Bureau of Health Manpower Education, Division of Nursing in September of 1972, several speakers discussed the relevancy of credit-by-examination to nursing education. Robert Altman presented a broad overview of the issue and defined terms which were used throughout the conference. He referred to the six major categories of credit-by-exam as defined by Hannah Kreplin:

1. Anticipatory - for high school seniors
2. Admission exams to waive prerequisites for advanced courses
3. Exams which are alternatives to attending a course for regular credit
4. Exams to demonstrate the college-level ability of non-traditional students
5. Exams covering more than one course (degree-by-examination)
6. Exams for graduate students to satisfy non-credit competency requirements

The various types of exams can be used for one of two purposes: Enrichment exams do not generate credit toward a degree; eliminate certain prerequisites but do not lessen the total number of credit hours necessary for graduation; Acceleration exams grant credit toward a degree as at the University of Utah which permits entering freshmen to take acceleration exams. If the students pass a certain number of exams, they may enter college with sophomore standing.

Dr. Altman noted that the issue of "enrichment" vs. "acceleration" is only one of the problems raised by credit exams. Educators must decide whether knowledge to be tested must be learned in a classroom or other formal educational setting; what limits, if any, will be placed on the number and type of credits which can be earned in this manner; whether the student must have been enrolled in the institution for a certain period of time or have paid various student fees; whether nationally standardized or faculty-prepared exams will be used and whether such credits will be transferable either into or out of the institution.

The Advanced Placement program, administered to many high school seniors, grants college-level credit for work done outside the institution but in a formal classroom setting. A nursing student entering a college program would be eligible to take such exams for her liberal arts courses. Nurse educators try to look beyond the formal classroom requirement because they recognize the value of experiential (clinical) learning but clinical exams have proven difficult to devise and administer. A practical nurse seeking advanced standing in an ADN program is often required to have both her degree and a valid license, as well as one year's work experience.

Altman, Robert A., "The Status of Credit By Examination and its Application to Nursing", Credit by Examination in Nursing, Proceedings from a Western Regional Conference, 1972, Elliott, J.E., Bunnell, J., Byerly, C.M., eds., Western Interstate Commission for Higher Education and Region IX, Bureau of Health Manpower Education, Division of Nursing, USPHS-DHEW, Sept. 1972, pp. 3-9.

2. San Jose City College (California)

Joan Ballard outlined the development of credit-by-examination (challenge exam) policy at San Jose College. 1967: College allowed for all first year nursing courses and used a combination of final, midterm exams for each course plus a 4 hour clinical evaluation. 1968: Completion of science courses became a prerequisite for taking challenge exams because all students challenging without these courses were unsuccessful. 1969: College adopted a credit/no credit grading system. Students could challenge a course by exam or attend theory segment of course and take written exams throughout the semester (lab portion not required).

A variety of exam prerequisites were drawn up, including matriculation, limitation on number of credits to earn through exams; prior approval of department head and counselor, etc. For nursing courses it was decided that the theory portion must be challenged before the clinical; courses must be challenged in sequence; student must meet science prerequisites; student can not repeat an exam which she has failed but may take one section of the exam again if that was all that was failed. The exams are faculty designed.

This presentation of a specific program, complete with policy formulation, problems, rationale, etc. followed Dr. Altman's generalized discussion of the issue.

Ballard, Joan, "Credit By Examination in an Associate Degree Program in Nursing", op. cit., pp. 21-24.

3. College Proficiency Examination Program (New York)

The only known statewide system of credit-by-examination is in New York. Over 300 faculty members from New York's public and private institutions of higher education have been involved in the development of the College Proficiency Examinations (CPE's). Since 1963, 35,000 credits have been earned through 22,000 proficiency tests in New York, in nursing sciences, health sciences, et al. Five tests in nursing were developed in 1968-9, and over 13,000 administrations of these tests have occurred in New York since that time. While policies regarding the amount of credit to be awarded for a particular exam, or the number and type of credits which may be earned vary from college to college, many institutions of higher learning in New York (and some out-of-state) recognize the CPEP as a valid means of earning credit. Forty-four collegiate schools of nursing, 28 diploma schools and 1 community college practical nurse program are listed

in the 1971 CPEP booklet as participants in the program. Students are advised that:

"...college professors have regular contact with oncampus students and have many opportunities to gain an accurate sense of each student's capabilities. The applicant for credit-by-examination is evaluated only once - through the examination. It is logical then, that the person seeking credit-by-examination should be prepared to perform above the minimum expected of the oncampus student." (p. 6)

It is also clearly stated that a school may require additional proof of competence, particularly in the areas of laboratory or clinical skills.

The New York College Proficiency Examination Program, handbook prepared by the University of the State of New York, The State Education Department, Albany, New York, 1971 (revised).

Schmidt, Mildred S. and William Lyons, "Credit for What You Know," American Journal of Nursing, Vol. 69, No. 1, January 1969, pp. 101-104.

4. External Degree Program (New York State)

Success with nursing College Proficiency Examinations (CPE's--see above) and the need to provide broader opportunities for moving experienced nurses up the educational ladder led Dr. Mildred Schmidt (Board of Nursing, State Department of Education of New York) to propose the development of the Associate in Applied Science (AAS) nursing Regents External Degree. This degree will require knowledge and skills expected of graduates of two-year campus-based programs and may be earned entirely through the passing of challenge examinations developed by faculty from New York and New Jersey colleges. Students can prepare themselves by studying at home, through on-the-job experience, or through formal college study or courses taken in military programs. The new nursing degree includes both general education and nursing requirements. Only candidates who have satisfied the requirements for each component will be awarded an Associate in Applied Science in nursing degree and will be eligible to take the RN licensing examination in New York State. No prerequisites of age, residence, or previous educational experience are required for enrollment. Individuals with RN license can participate to receive an associate degree. Exams will be offered for both classroom and clinical knowledge and should be ready by fall of 1973. Although the National League for Nursing and the College Proficiency Examination Program both offer pen-and-paper challenge exams, there has not yet been any systematic development of clinical exams to be used on a state-wide basis. Generally, a program offering clinical exams will have prepared its own system of evaluation, based on the structure and curriculum of that particular program. A Kellogg Foundation grant will enable the New York Regents to prepare and try out written and clinical performance examinations in nursing during the next 18 months. The clinical performance test will represent an objective assessment instrument at the technical nurse level.

Dr. Mildred Schmidt spoke to members of the Curriculum and Job Descriptions Committees of the study, as well as other interested persons, at Hartford Hospital on April 3, 1973. She stated that the Department of Education is not yet sure exactly who will be taking the series of challenge exams; but the test will be appropriate for LPNs desiring upgrading, and nursing students who have attended more than one program but have not yet received a degree from any one institution.

Since practical nurses in New York may receive their training in the high schools, vocational schools, and community colleges there is often confusion concerning granting of credit or advanced standing in an RN program. This problem is certainly not limited to New York State but the Board of Nursing policy is to encourage individual schools to grant credit to students with previous training and work experience, as well as to provide the CPEP and, eventually, the External Degree Program.

Presentation by Dr. Mildred S. Schmidt at Hartford Hospital, Hartford, Ct., April 3, 1973.

(NOTE: Current legislation approved by the Appropriations and Education Committees of the Connecticut General Assembly calls for a Board of State Academic Awards under the jurisdiction of the Commission for Higher Education. Academic degrees and credits will be awarded as "external degrees". According to the bill, the Board "shall develop and implement programs to improve opportunities in higher education through alternative modes of service, including but not limited to guidance and information services, registration and validation services, examination and degree granting services, technological delivery systems and projects of research and development")

V. ADDITIONAL FINDINGS

1. Northeastern University Research Center (Boston, Massachusetts)

In 1968, the Department of Economics conducted a pilot study, Hiring Standards for Paramedical Manpower, in the Greater Boston Area, involving 20 hospitals and 22 paramedical occupations, including the NA and the LPN. The key objectives were: 1) to explore duties performed by employees and to enumerate characteristics and skills of these employees required by the hospitals; and 2) to compare hiring standards as measured by the required education, training, and work experience, with the actual duty and functions performed on the job. This was followed by a 31-month time-function project to implement the recommendations of the pilot study. References to this study are made in other sections of this report; however, it is important to note that the project disclosed that there is a basic similarity in the functions of the LPN-NA occupations and that there are distinct differences in the occupations in the average time spent on different functions.

Goldstein, Harold M. and Morris A. Horowitz, Hiring Standards for Paramedical Manpower, Department of Economics, Northeastern University, Boston, Massachusetts, Sept. 1968.

Goldstein, Harold M. and Morris A. Horowitz, Restructuring Paramedical Occupations, Department of Economics, Northeastern University, Boston, Massachusetts, Jan. 1972.

2. SASHEP (Study of Accreditation of Selected Health Educational Programs)

The SASHEP Study Commission has prepared a report focusing on issues of accreditation of certain health educational programs, including programs in nursing. These issues include: accountability, structure and financing of accreditation; possibilities and advisability of expansion of accreditation; research in accreditation; the relationship of accreditation to licensure; and the relationship of accreditation to certification. The findings and recommendations of this Study Commission could serve as valuable guidelines towards the establishment of an accreditable articulated system of nursing education in Connecticut.

SASHEP Commission Report, National Commission on Accrediting, Washington D.C., May 1972.

PART B: LEGAL FINDINGS

REPORT ON THE STATUS OF NURSING IN CONNECTICUT

LEGAL ASPECTS

PREFACE

The purpose of this section of the Report is to consider and evaluate the legal aspects in the control, regulation and/or authorization of the profession of nursing in the State of Connecticut. This analysis necessarily involves determining what legal restrictions pertain to each of the three levels of nursing which exist in Connecticut. As evidenced by the research set out in the following memorandum, "legal restrictions" is a rather ambiguous and amorphous term, which may be defined primarily in two contexts. These two contexts are: 1) licensure and internal standards governing the profession, and 2) civil liability and medical malpractice problems.

Concerning licensure and internal standards, the primary responsibility for defining and promulgating such standards lies with the State Nursing Board of Examiners. The basic authority for the duties and scope of operations for this Board is embodied in Title 20 of the Connecticut General Statutes. As revealed by the research herein, the focal point of the Board's existence has been to define broad standards for the licensing of registered practical nurses. The basic definitional statute (Title 20 - '87) ambiguously address itself to the required standards for an individual to obtain a professional license. Title 20 - '99 loosely defines what is acceptable "professional conduct". Whether the Board would presently possess sufficient authority to define further what specific duties may or can be performed by one class of nurse or the other is as yet an unresolved question. It is possible that specific delineation of duties vis-a-vis the statutory professional categories of nurses may have to be defined, if desired, by the legislature through passage of specific statutes. It should further be noted that the disciplinary power of the Board looks only to "how" the job of a nurse is carried out, as opposed to "what" jobs or duties are authorized to be performed by virtue of the granting of a nursing license.

The second context involves the issue of civil liability and medical malpractice. The threshold observation must be noted, specifically that the profession of nursing is apparently treated in precisely the same fashion as is that of the medical doctor. No explicit statutes exist which define for employers of nurses what duties may be safely performed by a particular class of nurses so as to insure against future potential civil liability. Hence, employers of nurses are faced with having to construct their own system of job classification and must strive to insure that whoever performs any particular job does so within the bounds of a legally adequate standard of due care. Thus, the law only requires that medical care be rendered by all medical institutions and personnel in conformity with whatever is the accepted standard of medical care in the surrounding local community. Obviously, this approach is not the best for preventing future medical malpractice suits, but nevertheless is the one with which we are presently forced to work.

It should be noted that the Nursing Board could play a large role in defining "authorized" duties for the two nursing classifications. Such "job classifications" could have a substantial impact on future medical malpractice suits. It would not be unreasonable to find courts, in such cases, looking to standards set by the Board as one indicia in evaluating whether a medical institution had rendered proper care.

Further explication of these problems and dilemmas alluded to here can be found in the following memorandum.

INTRODUCTION:

"State licensure laws affecting nursing present no perceived obstacles to extending roles for nursing as envisioned in this report." (Conclusion of the Report of the Secretary's Committee to Study Extended Roles for Nurses' Department of Health Education and Welfare, November 1971).

Similarly Connecticut laws do not seem to present any obstacles to a progressive and creative program for the Nursing Profession. The law provides a broad framework and a general definition of standards; the regulations give detail as to procedures to be followed in determining policy, and the Administrative Procedures Act assures fairness and consistency while allowing some latitude for experiment and productive change.

STATUTES:

Connecticut statutes give a general definition of Nursing (20-87), create a state board of examiners (20-88), and provide sanctions for violation of the Practice Act (20-102).

The Nursing Board of Examiners determines the qualification of applicants for the practice of nursing (20-92), has jurisdiction to hear and decide all issues of improper conduct, subject to review by the court of common pleas (20-99) and makes annual visits to and approval of all programs of Nursing education, all schools for the training of licensed practical nurses and all hospitals connected therewith which prepare persons for examination by the Board (20-90). Use of titles RN (20-95) and LPN (20-98) is restricted to those who have been certified by the NBE, and practice of nursing for remuneration is allowed only by certified persons except for domestic and emergency care or work done by qualified students (90-101 & 102). Thus the NBE can effectively control the practice of nursing and the education of nurses in Connecticut.

The NBE is composed of five members appointed by the governor; all members are required to be state residents, and all of the five must be registered nurses with at least five years experience in professional nursing and one of whom must be affiliated with an institution or organization affording opportunity for the education of practical nurses (20-88).

Registration or licensing is granted when the applicant has demonstrated to the satisfaction of the Board that he or she has completed the required educational preparation in a program approved by the Board, and when he or she passes, to the satisfaction of the Board, the examination whose contents are determined by the Board (20-96 & 93). Certification without examination may be done at the discretion of the Board where the applicant has graduated from a school of nursing which met the requirements of this state at the time the applicant graduated (20-94) or where the applicant has been certified in another state whose requirements are equivalent to those of this state (20-97). There is a further requirement that the applicant be of good moral character (20-93 & 96).

REGULATIONS:

1. Registration and certification:

Applicants must file applications furnished by the Board, in accordance with

instructions (20-90-5), take examinations whose content shall be determined by the Board (20-90-8), and pass according to the minimum standard determined by the Board (20-90-10) in order to be certified in Connecticut. Applicants for registration without examination will be considered according to the preparation of the individual applicant (20-90-11).

2. Accreditation:

The regulations set out the requirements for faculty education and experience, length of program, and admission standards for a Professional School of Nursing - whether hospital or college program - (20-90-12 thru 22), and a Practical Nursing Program (20-90-27 thru 38). Proposed rules do the same for high school courses (20-90-39). The Board must approve the use of affiliated hospital and clinical program which must have "adequate" facilities. Student-instructor ratio must be "appropriate to each course, there shall be an "adequate" foundation in the sciences, and the program shall demonstrate "concern for the total well being of students."

THE UNIFORM ADMINISTRATIVE PROCEDURE ACT:

This act, which became effective January 1, 1972, provides protection against excessive or arbitrary exercise of power by state boards, commissions, departments, or officers. The organization is required to describe its organization and general course and method of operations, adopt formal rules of practice, make public all regulations and other written statements of policy and make public all final orders, decisions and opinions (4-167). Notice must be given before new rules are adopted, amended or repealed (4-168) and regulations must be approved by the Attorney General (4-169) and reviewed by a legislative committee (4-170). Any interested person may petition for adoption, amendment or repeal of a regulation (4-174) and the validity or applicability of a regulation can be litigated in the court of common pleas (4-175). Contested cases are entitled to hearing with notice (4-182) and will be subject to judicial review if all administrative remedies are exhausted (4-183). Final appeal may be made to the Supreme Court (4-184).

If applied to all actions taken by the NBE, this act will result in a clearer definition of policy and reasons for decision of the Board. Where the statutes and regulations prove a great latitude for discretion of the part of the Board, this restriction will create continuity, predictability and assurance of greater reason and logic in decisions.

OTHER AGENCIES:

Commission on Higher Education, Telephone interview with Dr. James: In accrediting Community College Programs in Nursing, the Commission works closely with the Nursing Board of Examiners. The procedure is in two steps. First the Board examines the professional aspects of the proposed program, and then the Commission looks at the degree aspects. On their visits to the institution, members of the Commission are accompanied by a member of the NBE.

Dr. James further discussed the existence of several different philosophies of nursing practice and education.

HOSPITAL POLICY:

Once a nurse is certified, her responsibilities and limitations are created and

defined by her employer. The statutory definition of RN and LPN are in terms of education and acquired skills. The duties of each level are defined by hospital job descriptions and on-the-job orders. The job description will lay out the general area of responsibility, and task assignment will more closely delineate exact limitations. In constructing job descriptions it must be remembered that a very clear definition may not allow sufficient flexibility for change, emergency, or recognition of varying degrees of competence, but an over general description will be of little value in providing direction.

LIABILITY:

There are no Connecticut cases dealing with the liability of nurses or construing the Connecticut Nurse Practice Act; therefore, analogy will have to be made to other states and to cases in Connecticut dealing with other members of the Health Professions.

A nurse will be held personally responsible for her intentional torts and obvious personal negligence, Weinstein v. Prostoff, 213 NYS 2d 571 (1961), Norton v. Argonaut Ins. Co., 2d 249 (1962), Crowe v. Provost, 374 Sw 2d 645 (1963), Duling v. Bluefield Sanatorium Inc. 142 SE 2d 745 (1965). The test of negligence will be whether the defendant performed in accordance with the standard of nursing procedure in the area, Whaley v. Fowler, 313 P 2d 197 (1957), Connecticut Law of Torts, Sec. 88, but an established custom will not lower a statutory standard, Barber v. Reinling, 411 P 2d 861 (1966). A doctor is responsible for care rendered under his direction Huss v. Vande Hey 138 NW 2d 192 (1956), and an institution may be responsible for allowing inexperienced personnel to have critical contact with a patient Kapuschinsky v. US 248 F. Supp 732 (1966).

Therefore where statutory standards are general, the supervising doctor or institution can exercise greater discretion in assigning tasks, but must assume the risk of their decision. Tighter statutory restrictions may more clearly define a reasonable standard of care, but might also create absolute liability where a nurse exceeds those restrictions. In other words, liability will be automatic where the statutory limits are overstepped.

CONCLUSIONS:

In Connecticut the Nursing Board of Examiners has the opportunity to control the Nursing Profession to a great extent. Its powers are limited somewhat by the Administrative Procedure Act in that decisions and policies are required to be articulated, made available to the public and are subject to review. Since the laws do provide for freedom of movement within the profession, policy change will best be effected through the decisions and regulations of the Board. Now that their decisions will be articulated, public and challengeable, the Board can serve as a medium through which the progress of nursing can be charted and changed, if necessary.

Prepared for the Connecticut Institute
for Health Manpower Resources

BY: Alice Simpson
Graduate Research Assistant
University of Connecticut
School of Law

*Public Acts have been passed by
Connecticut Legislature to allow
LPN programs to be offered in other
than vocational-technical schools.

Rodney R. Jones, Consultant
Attorney at Law
Lecturer,
University of Connecticut
School of Law

RECOMMENDATIONS

The following recommendations were made by the study's legal consultants as a follow-up to their research report. In addition to the inclusion of these recommendations at this point, they have also been incorporated into SECTION FIVE of this report.

- I. THAT JOB PERFORMANCE STANDARDS BE PROMULGATED AND RATIFIED BY THE DEPARTMENT OF EDUCATION IN CONJUNCTION WITH THE COMMISSION ON HIGHER EDUCATION AND THE NURSING BOARD OF EXAMINERS, WHICH WOULD DEFINE JOB CHARACTERISTICS AND SKILLS REQUIRED FOR EACH OF THREE LEVELS OF NURSING CARE — REGISTERED NURSE, LICENSED PRACTICAL NURSE, AND NURSES AIDE.
- II. THAT ALL ACCREDITED SCHOOLS CONFORM WITH THESE STANDARDS IN TERMS OF COURSES AND SUBJECT MATTER AND THAT CERTIFICATES* BE AWARDED UPON ATTAINMENT OF THESE SKILLS AS REFLECTED BY COMPLETED COURSEWORK.
- III. THAT THESE CERTIFICATES BE MADE A PREREQUISITE FOR ANY LICENSING BY THE BOARD OF NURSING EXAMINERS OF EITHER REGISTERED OR LICENSED PRACTICAL NURSES.
- IV. THAT ALTERNATIVE METHODS FOR CERTIFICATION AND SUBSEQUENT LICENSURE BE INVESTIGATED IN ORDER TO ALLOW FOR RECOGNITION OF SKILLS ACQUIRED THROUGH EXPERIENCE, AND TO PROVIDE FOR EXPEDITIOUS MOVEMENT FROM ONE LEVEL OF NURSING TO ANOTHER.
- V. THAT ALL EMPLOYERS IN THE STATE OF CONNECTICUT BE URGED TO ABIDE BY AND HONOR SUCH CERTIFICATION IN EMPLOYMENT PRACTICES, PARTICULARLY WITH RESPECT TO THE PRESENTLY UNLICENSED NURSES AIDE JOB LEVEL.

These recommendations are made with the recognition that articulation of nursing standards lies almost entirely within the domain of the educational institutions and departments, and is only broadly circumscribed by legal considerations. The law is only concerned that careful and competent medical attention be rendered to the public by employees of public and private medical institutions. The definition of job levels and the training of medical personnel is the direct responsibility of appropriate educational facilities and state regulatory boards.

* Certification, as opposed to legal licensure, is recommended. Present legal requirements do not mandate that the Nurses Aide category be licensed, as is the case with RN and LPN categories.

Rodney R. Jones
Alice Simpson

**PART C: PROGRAM ANALYSIS
FINDINGS**

3

NURSE AIDE PROGRAM--NA

Findings:

- 1) The original need for such a program was expressed by the Connecticut State Employment Service and a training program was organized under the 1962 Manpower Development & Training Act. Additional federal legislation provided funding through Vocational Education Act of 1963; 1968 Title I amendments; and the Educational Amendments of 1972.
 - 2) The nurses' aide program does not require a license or certification and therefore the governing rules and regulations are not defined, as with the licensed practical nurse and the registered nurse. The present Guidelines for nurses' aide programs are provided through the State Department of Education, Vocational Division (see appendix).
 - 3) The Guidelines for the nurses' aide program were developed by the Connecticut Board of Nursing Examiners, Health Department, Connecticut Nurses Association, and the Department of Vocational Education.
 - 4) The purpose of the training program as stated in the State Department of Education Guidelines is: "To prepare a selected group of persons to perform tasks supportive to nursing practice which are both safe for the patient and practical for nursing service."
 - 5) "The nurses' aides are employed and trained to perform tasks which involve specified services for patients as delegated by the registered professional nurses and performed under the direction of registered professional nurses or licensed practical nurses. They carry out tasks supportive and complementary to nursing practice."
 - 6) "The total hours of classroom teaching, lecture, demonstration and return demonstration and supervised practice on-the-job should total between 150-180 hours extending over a 5-6 week period of time."
- "It is suggested that the number of class hours, including return demonstration, be between 120-150 hours with provision being made for supervised work experience of at least 60 hours. The latter may need to be increased, dependent on the trainee." (Guidelines)
- 7) Some of the trainee qualifications listed in the Guidelines specify: reading and writing English ability at least ninth grade level; demonstrated aptitude, manual dexterity and mental capacity. The Connecticut State Employment Service administers a Standardized Aptitude Test Battery which measures general knowledge and manual dexterity. There is no reference to mathematical ability or age/sex restrictions.
 - 8) Guidelines suggest the following be included in the NA course: role of nurse aide in relation to patient care team, transportation of patients, food and nutrition, elimination, personal care of patients, housekeeping duties, nursing care of patients with special problems, basic record-keeping and simple treatments. The student, upon completion of the course, should be able to:
 - Transport patients and assist in ambulation safely and efficiently,
 - Provide safe and clean patient environment and work units,
 - Provide comfort and hygienic care,
 - Assist with food service and feeding patients,
 - Facilitate communications and keep records,
 - Assist with selected diagnostic procedures.

9) Several states have fully developed nursing programs with course content and behavioral objectives directed towards providing articulation, i.e. Arizona, New Jersey, Oregon. Included also are programs on "orientation to health careers."

10) There are currently 37 nursing assistant courses offered in Connecticut public high schools which are partially reimbursed by the State Department of Education. There are approximately 750 students involved. (See Appendix).

11) Nurse Aide programs are also given at 18 hospitals in Conn. There are a minimum of 200 students involved but it is difficult to determine an actual number since each hospital may repeat its NA course several times during the year (see appendix).

12) The following is taken from "Statistical Data on Connecticut Students Completing Vocational Programs in 1972." For nurses' aide:

| <u>Total number of Graduates</u> | <u>Continued training in full-time school</u> | <u>Available for Employment</u> | <u>Employed in Occupation for which Trained or in Related Occupation</u> | | |
|----------------------------------|---|---------------------------------|--|-----------------------------------|------------------|
| | | | <u>Number</u> | <u>Percent of those available</u> | <u>Part time</u> |
| 1971 300 | 125 | 128 | 76 | 59% | 6 |
| 1972 433 | 175 (143 health field) | 229 | 126 | 55% | |

A comparison of 1971 to the 1972 statistical data on Connecticut students completing vocational programs shows that there was 69% increase in the total number of graduates completing the nurses' aide training. 143 of the 433 students (33%) continued training in full-time school. Of the 229 students available for employment, 126 (55%) were employed in occupations for which they trained or in related occupations. Although the percentages may be lower than in the previous years, the actual numbers of students continuing with school or working represent a substantial increase.

- 13) According to the Guidelines, the nurses' aide instructor is responsible for:
- 1) classroom instruction, demonstration, return demonstration, supervision of work experience
 - 2) determination of methods used for all phases of the program
 - 3) extensive use of visual aids, pamphlets, etc.
 - 4) developing content and lesson plans

14) The Guidelines show that four state agencies concerned with nursing requested representation on the local advisory committees serving the local State Employment Services. These committees advise in the development and evaluation of nursing courses. The evaluation of the nurses' aide training program is expressed in terms of supply and demand for such programs, rather than an evaluation of the purpose of the programs as stated in the Guidelines. (See #2.)

15) Hospitals commonly evaluate students on the basis of their performance. In many cases hospitals have devised and use lengthy and detailed check lists, record observations of all kinds of student performance of tasks, and note both degrees of skill attained and the speed with which the tasks are learned.

16) In the New London area the high school and hospital have developed an interchange of resources. The high school provides the background hospital science course. The hospital in-service personnel provide the same nursing assistant classroom training for high school students as they do for any adult in the regular in-service training. Students receive this training for two hours every Friday afternoon. Clinical training is provided during a large block of time after school and/or on weekends. Students are paid for the clinical training period, and if the course is taken during the student's junior year, she is allowed to work as nurse's assistant during her senior year with full nurse's assistant pay. Students are, however, required to finish high school to insure employment.

17) Difficulties arise in adhering to clinical obligation in the NA programs in the high school:

- 1) transportation
- 2) conflict of school vs. hospital schedule
- 3) brevity of time spent in actual nursing duties, etc.

Findings: LICENSED PRACTICAL NURSE PROGRAM LPN

- 1) There are 10 LPN programs located in State Regional Vocational-Technical Schools with approximately 835 students enrolled in 1973.
- 2) According to the Board of Nursing Examiners, 698 practical nurse graduates received their license in the calendar year 1972.
- 3) The following is taken from "Statistical Data on Connecticut Students Completing Vocational Programs in 1972." For Licensed Practical Nursing:

| Total Number of Graduates | Continued training in full-time school | Available for Employment | Employed in Occupation for which Trained or in Related Occupation | | | | |
|---------------------------|--|--------------------------|---|----------------------------|-----------|-------------|--|
| | | | Number | Percent of those available | Part time | Un-employed | |
| 1971 | 590 | 15 | 536 | 96 | 9 | 10 | |
| 1972 | 577 | 25 | 475 | 92 | 13 | 26 | |

Although comparison data on practical nurse graduates shows a decrease in the number of graduates from 1971-1972, (590 to 577), there was a rise from 2% to 4% (25) of students who chose to continue training in a full-time school. It would be interesting to know whether those who are part-time employed are part-time students. In 1972 ninety-two percent of the 475 available for employment had jobs, with an increased number of graduates seeking employment from the previous year. This was a reflection of the tighter economy in spring, 1972.

- 4) Although practical nursing programs were previously tied to "one form" in the vocational technical schools, Public Act 142 was passed last year to allow these nursing courses to be offered in the high schools. Rules and regulations are presently being drawn by the Board of Nursing Examiners.
- 5) The present LPN course is one year in length and consists of four months of classroom instruction in the academic setting and eight months' clinical experience combined with classroom instruction in the clinical facility.
- 6) The hospital with which the LPN school is associated shall provide adequate clinical services in four areas. (Rules and regulations - State of Conn. Bd. of Nurse Examiners.)

Medical and Surgical Nursing and specialties within these services.....24 weeks
Maternal and Child Nursing10 weeks

- 7) All applicants to LPN programs must have a diploma from an accredited high school or qualifying certificate on the 12th grade level if the applicant is under 21. If the applicant is over 21, two years of high school or the equivalent is required.
- 8) The philosophy of practical nurse education (Curriculum Guide) emphasizes:
 - a. Primary function: "to give effective patient care in so far as her preparation permits."
 - b. Role: prepared to function independently at bedside in an uncomplicated nursing situation; qualified to act in more complex situation as an assistant to doctors, professional nurse and other medical and nursing personnel.

- 9) Curriculum objectives for the LPN program (State Dept. of Education):
- a. To foster self-understanding which will enable the student to function more effectively as a person and a practical nurse.
 - b. To help the student develop a concise concept of her role as a member of the health team so that she may recognize her responsibilities and limitations and also be able to interpret her dual role to others.
 - c. To aid the student in developing effective professional relationships with patients and the many members of the health team.
 - d. To encourage the student to exemplify good personal health and hygiene habits and to understand and appreciate the health needs of patients.
 - e. To help the student give safe and intelligent nursing care in limited nursing situations.
- 10) No behavioral objectives are currently found in the State of Conn. material for LPN programs. These are presently being developed to be submitted to the Board of Nursing Examiners.
- 11) The State Dept. of Education offers a complete set of course outlines to guide LPN instructors in developing lesson plans:
- a. Courses in the vocational-technical school include physical and biological sciences (body structure and function), elementary bacteriology and nutrition; orientation to practical nursing; inter-personal relations; legal aspects; and concepts of physical and mental health.
 - b. Clinical courses in the affiliating hospital include medical nursing, surgical nursing, obstetric nursing and nursing of children. Each course shall include related aspects of fundamentals of nursing, diet therapy, administration of common drugs, first aid, disaster nursing and additional pertinent concepts.
- 12) Evidence of articulation is appearing in Connecticut with the offering of challenge examinations for the associate degree, e.g. Bridgeport, Mattatuck.
- 13) Nine responses from LPN directors and instructors to an inquiry concerning NA participation in the LPN program and LPN participation in RN programs included the following comments:
- a. Unevenness of knowledge exhibited by NAs currently enrolled in LPN programs.
 - b. Preparation should further emphasize communication skills, patient contact experiences, basic nursing skills, study habits, and punctuality for possible advanced standing.
 - c. The majority of the respondents felt that LPNs should be granted advanced standing or eligibility for taking challenge exams in RN programs, while others felt program goals were different for each program.
- 14) Eight LPN students who are currently enrolled in RN programs expressed these comments:
- a. Improved counseling at the high school level would have been extremely helpful to them in their career choice.
 - b. LPNs who would like to further their education are hampered by the cost of education. They expressed interest in a work study program.
 - c. The LPN program was initially chosen by some because it was short, less expensive, provided immediate employment, and gave them the chance to see if they really liked nursing.

Findings:

- 1) There are four Associate Degree Registered Nurse programs currently operating in the State of Connecticut: Jr. College of Connecticut (Univ. of Bridgeport), Quinnipiac College, Norwalk Community College and Mattatuck Community College.
- 2) Mohegan Community College has been approved to admit students in Fall 1973. Tunxis Community College has been approved by the Commission for Higher Education to develop a nursing program. Manchester Community College has developed a combined LPN-AD program for which it is seeking approval from the Board of Nursing Examiners.
- 3) Completion of a college preparatory course in an accredited high school is recommended for admission to an Associate Degree nursing program.
- 4) The minimum length of the AD nursing program shall be equivalent to 5 academic semesters.*
- 5) The nursing core in an AD program which correlates theory with practice shall be planned as "a total unit through selective experience leading to the development of knowledge, understandings, appreciation in interpersonal skills, and manual and communication skills.*"
- 6) "Clinical experience concurrent with related academic subjects."*
- 7) Clinical experience shall be "enriched by an adequate foundation in the social, physical and biological sciences essential to effective nursing practice."*
- 8) Clinical courses shall meet these requirements:

| | | |
|------------------------------|--------------|----------|
| Introduction to nursing | 1/2 semester | 8 weeks |
| Medical and surgical nursing | 3 semesters | 48 weeks |
| Maternal-child nursing | 1 semester | 16 weeks |
| Psychiatric nursing | 1/2 semester | 8 weeks |

Each area to include related aspects of pharmacology, diet therapy, rehabilitation, community health, disaster nursing and additional pertinent concepts.*
- 9) The hospital with which the AD program is associated should be accredited and provide adequate clinical services for all four clinical services: medical, surgical, pediatric, psychiatric.
- 10) All community college nursing programs in Connecticut have these similarities:
 - a. Intro. to Nursing or Fundamentals of Nursing course.
 - b. A course primarily concerned with maternal and child nursing.
 - c. Nursing seminar.
 - d. A series of four courses called Physical and Emotional Illness or similar title which integrate nursing skills and theory. The organization of all course material is from simple to complex, normal to abnormal.
 - e. Courses in physical sciences, social sciences, English and communication arts and electives.
- 11) Behavior objectives and course outlines for the four AD programs were available for one and partially so for the others. Objectives were identified as program objectives, not behavioral.
- 12) Three Connecticut AD/nursing programs are affiliated with The New England Council for Higher Education for Nursing (NECHEN). This group has developed a rationale for a published listing: "Progressive Behavioral Competencies for the AD nurse." (Appendix)
- 13) Modes of AD-RN articulated programs are being developed throughout the country, according to Research Director, Dr. Carrie Lemberg of the National League for Nursing. She expressed a willingness to share information on the League's open curriculum study which should have pertinent information for this articulation study. However, summary results have been delayed for the timing of this report.

COMMONALITIES AMONG THE THREE LEVELS OF NURSING

Findings:

1) Rules and regulations of the Board of Nursing Examiners specify course content for the licensed practical nurse and the registered nurse. The following analysis indicates the similarity of requirement curriculum; the important difference is the amount of time required for the didactic/clinical:

a. Section for Professional Nurse Education: "The school of nursing shall provide a program in accordance with the requirements contained in these regulations. There shall be demonstrated concern for the total well being of students."

Section for Practical Nurse Education: "The school of practical nursing shall provide a program in accordance with the requirements contained in their regulations. There shall be demonstrated concern for the total well being of students."

- b. Clinical Courses:
- | | |
|---------------------|---------------------|
| <u>RN</u> | <u>LPN</u> |
| medical nursing | medical nursing |
| surgical nursing | surgical nursing |
| obstetric nursing | obstetric nursing |
| nursing of children | nursing of children |
| diet therapy | diet therapy |
| disaster nursing | disaster nursing |
| related aspects | administration of |
| of pharmacology | common drugs |
- c. "Clinical courses with related theory and experience shall meet the following requirements:"
- | | |
|------------------------|------------------------|
| <u>RN</u> | <u>LPN</u> |
| Med-Surg. nursing - | Med-Surg. nursing - |
| 48 wks. | 24 wks. |
| Maternal-Child nursing | Maternal-Child nursing |
| - 16 wks. | - 10 wks. |
- d. Didactic Programs:
- | | |
|-------------------|-------------------|
| <u>RN</u> | <u>LPN</u> |
| Physical and Bio- | Physical and Bio- |
| logical Sciences | logical Sciences |

2) Analysis of the submitted curriculum from the AD-RN programs offered in Connecticut and the LPN required course by the State Dept. of Education indicates that the Rules and Regulations of the Board of Nursing Examiners have been observed. Introductory or Fundamentals of Nursing courses are presented in LPN and/or AD-RN; Physical and mental illness from normal to abnormal, simple to complex -- all adhere to BNE requirements; basic science (AD-RN) and elementary bacteriology, nutrition and body structure and function (LPN). Several graphic charts appear in Appendix.

3) In comparing the functions and competencies of the LPN and ADN one observes many commonalities between the LPN and the first year ADN; i.e. areas of ethics, observation and communication, patient relationships, comfort - safety, and medications and treatments. ADN emphasizes integration and transfer of knowledge from physical, behavioral and social science to nursing practice; and interpretation, evaluation and judgment in the second year.

- 4) Using the UCLA broad functional areas, we found that a commonality of Curriculum content for NA, LPN, AD-RN occurs in the Connecticut programs to a greater or lesser degree: 1) Divisional, therapeutic assistance activities; 2) Safety and Comfort (patient protection, personal hygiene, spiritual care, patient need for movement); 3) Nutrition and Elimination (patient need for foods and fluids, elimination, oxygen transport and exchange); 4) Treatments, procedures, medications, diagnostic activities; 5) Observation and Communication; 6) Administration, Coordination, Housekeeping.
- 5) Commonality between NA and LPN: Chart
- 6) Programs outside Connecticut that utilize the concept of articulation:
- One example of an NA-LPN, AD-RN program within 2 years is offered by Central Arizona Community College in Arizona. After one semester of training, a student can become a nurse's aide; after two semesters, an LPN, and after four semesters an AD-RN.
 - A modularized approach to AD nursing curriculum (Learning Experience Guides -- LEGS) has been developed by Anne Roe, Ed.M., R.N., and Mary C. Sherwood, Ed.M., R.N. (published by John Wiley and Sons) utilizing instructional packages, games, tapes, films and other media. The Bucks County, Pennsylvania Grand View Nursing Program utilizes the LEGS material along with other materials in a one-year program for upgrading qualified Licensed Practical Nurses to Registered Nurses. By pretesting, this approach allows individualization of program content according to what the student has already learned and needs to know. A program tailored to individual needs is planned for each student for adequate preparation to qualify as a registered nurse.
 - The task analysis approach utilized by the Lansing, Michigan Career Center identifies the basic skills common to all levels within an occupation, i.e. nursing, according to Jan Danford, Instructional Services Coordinator. As the performance objective for each skill is met, the next skill to be acquired progresses in depth and scope of knowledge. The LPN program is given in their secondary career center with arrangements for completion at the community college.
- 7) Despite the LPN-RN commonalities of curriculum content, the scope and depth of knowledge and skills for the registered nurse is recognized for Medicare and Medicaid (Title 18 and 19) reimbursement. Conditions of participation of hospitals and nursing homes for federal insurance require that a registered nurse be present 24 hours or available for supervision over the activities of the licensed practical nurse, including administration of medications.

COMPARISON OF CURRICULUM CONTENT:

NURSING ASSISTANT -- LICENSED PRACTICAL NURSE

CONNECTICUT

Guidelines-Nurse Assistant
Conn. Dept. of Ed.

Sample
Nursing Assistant Course

Licensed Practical Nurse
Fundamentals of Nursing
Conn. Dept. of Ed.

Intro. to course

1. Objective of course
2. Description of course
3. Relationship of nurse aide to other members of the team
4. Principles of ethical conduct
5. Legal implications
6. Grooming

Intro. to the patient

- Answering the patient's signal
- Admission of a patient
- How to start a patient's record
- Handwashing
- Making a paper bag

Care of equipment/supplies

- How to keep service (utility rm/ kitchen in order.
- General instructions on cleaning articles/equipment.
- How to care for linen-clean/soiled.
- How to use water sterilizer.
- How to use clean pick-up forceps.
- How to clean a patient's unit.
- Making an empty bed.

Special Safety/Comfort Measures

- How to use a bed cradle.
- How to use footrest, footboard.
- How to use foam rubber cushion.
- Bed rails-care of appliances for safety-dentures, glasses, walkers, etc.

Moving patients

- a. Back-lying
 - b. Side-lying
 - c. Face-lying
- How to assist a patient from bed/when
 - How to move patient fr. bed/stretchers
 - How to help a patient walk.
 - How to assist a patient to toilet.

Orientation to health care facilities

1. Function/purpose of health care instruction
 - a. Nursing home
 - b. Hospital
2. Organization
 - a. Nursing personnel
 - b. Medical staff
 - c. Administration
 - d. Other personnel

Interpersonal relations

1. Qualities of NA-manner, conduct, dress, grooming.
2. Communicating with patients, visitors, staff.
3. Responsibility-regarding guarded info.
 - to know work-avoid tasks.

Answering the patient call light

Carrying instrs./doing errands

Cleanliness in health care institution

1. Microbiology and bacteriology
 2. Aseptic techniques-handwashing, responsibility of staff, lab tech, infect.
- Concepts of contamination-cross infect.
- cleaning of dish. unit, care of unit kitchen, autoclaving equip., preparation of equip. for return to central supply

Rules and regulations

- a. Safety
- b. Fire
- c. Emergency

Personnel areas

Equipment and Supplies

- Responsibility to whom-institution, patient, insurance.
- Conservation of equip./supplies.
- Care of the patient unit

1. Equipment

2. Daily care-neatness/damp dusting

Bedmaking

1. Open
2. Unoccupied (closed)
3. Occupied
4. Anesthesia

Special safety/comfort measures

1. Bed-rails (how, when/why used)
2. Use/application: foot cradles, board, rest/support.
3. Preliminaries in care/safety of traction apparatus.

Posture and body mechanics

1. Proper techniques for self protection.
2. Positioning/comfort of patient.
3. Moving/lifting-in/out of bed, in bed, transporting via wheelch, gerc chr, strbr
4. Concern for patient's personal equip., dentures, wigs, glasses, walkers, hearing aids, braces, crutches, canes, prothesis.

Physical therapy

- a. Lecture/demo, crutch walking, use of walker.
- b. Demo bi-laterally paralyzed person.
- c. Reinforce need of nursing staff to carry on pt 24 hours.

- A. Definition
 - B. Physical factors-lighting, waste disposal, water supply, food supply
 - C. Atmospheric factors-temperature of room, humidity, ventilation
 - D. Aesthetic factors-prevention of noise, elimination of odors, use of color, flowers, pictures, good housekeeping
 - Surgical asepsis-importance of sterile technique, methods of sterilising equip., how to handle sterile supplies.
 - E. Safety factors-care of equip., fire prevention, accident prevention, freedom from vermin pathogens.
- Patient's immediate environment in the hosp.-equip. care of unit during hospitalisation, terminal care of unit after disch., transfer or death.
- Bed making-equip. and linens, care of linens, types of beds
- a. Closed bed
 - b. Open bed
 - c. Occupied bed
 - d. Post anesthetic or recovery bed
 - e. Special types of beds

Skillful handling of pts./use of good body mechanics, undressing pt. in bed, dressing pt. in bed.

Handling/lifting limbs- lifting pt. from side to side in bed, getting pt. out of bed into chair, wheelchair, stretcher.

Use of crutches and walker - proper positioning of a pat. for good body alignment, comfort, support/safety.

Body positions used-fowler, rordenburg, prone, dorsal, dorsal recumbent,-lateral, frontal, anterior, posterior, Sims,-genupectoral (knee chest)-lithotomy.

Use of sandbags-footboards-bed cradles.

Use of side rails-precautions.

Use of restraints-reason for use-materials or equipment used for restraints.

COURSES OFFERED IN NURSING PROGRAMS IN CONNECTICUT

LICENSED PRACTICAL NURSE PROGRAM

ASSOCIATE DEGREE NURSING PROGRAMS

| NURSING COURSES | NORMAL | | | | QUANTITATIVE |
|-------------------------------------|--|--|--|--|--|
| | BRIDGEPORT | MATTITUCK | RUSHMAN | NORWALK | |
| INTRODUCTORY COURSE | Basic Nursing Concepts (5) | Fundamentals of Nursing (6) | Intro. to Nursing Science (6) | Intro. to Nursing (6) | Fundamentals of Nursing (5) |
| MATERNAL CHILD FAMILY HEALTH | Maternal Child Nursing (6) | Concepts of Family Care (6) | Nursing Sciences I (5) (Maternal and Child Care) | Maternal and Child Nursing (7) | Family Health Nursing (5) |
| NURSING SEMINAR | Trends in Nursing (2) | Trends in Nursing (?) | Nursing Seminar (3) | Trends in Nursing (2) | Nursing Seminar (2) |
| GENERAL NURSING COURSES | Physical and Mental Illness I (6) Phys. and Ment. Illness II (6) Phys. and Ment. Ill. III (9) Phys. and Ment. Ill. III (9) Phys. and Ment. Ill. IV (3) | Phys. and Mental Illness I (6) Phys. and Ment. Ill. II (9) Phys. and Ment. Ill. III (9) Phys. and Ment. Ill. IV (3) | Nursing Sciences I (5) Nursing Sciences II (5) Nursing Sciences III (5) Nursing Sciences IV (6) | Phys. & Ment. Ill. I (4) Phys. & Ment. Ill. II (8) Phys. & Ment. Ill. III (8) Phys. & Ment. Ill. IV (7) | Intro. to Obstet. Nursing (10) Intro. to Pediat. Nursing (10) Legal Aspects of Nursing (10) |
| PHYSICAL SCIENCE | Human Ecology (Biology) (5) Anatomy, Physiol., Chem. Microbio., Pathol., (5) | Life Sciences I (4) Anatomy, Physiol., Chem. Life Sciences II (4) Physics, Microbio., (4) | Human Biology (4) Microbiology (4) | Hum. Anat., Physiol., Chem II (4) Pathogenic Microbiology (4) | Interpersonal Relations (10) Concepts of Health (10) Emergency Nursing (10) Common Drugs and Admin. (30) Intro. to Med-Surg. Nursing (50) (Includes Mental Health Unit) Medical Surgical Nursing (80) Nutrition & Diet Therapy (20) First Aid (10) |
| SOCIAL SCIENCE | Psychology (3) Principles of Sociology (3) | General Psychology (3) Intro. to Sociology (3) Developmental Psych. (3) | General Psychology (3) Sociology (3) Developmental Psych. (3) Social Stud. elective (3) | General Psychology (3) Principles of Sociology (3) | Elementary Bacteriology and Body Structure & Function (45) * Pre-clinical |
| ENGLISH & COMMUNICATIONS | English (Composition) (3) English (3) Effective Speech (3) | Composition (3) | English Composition (3) English elective (3) | College English (3) English (3) | |
| EDUCATION | Hum. Growth and Development (3) | | | | |
| ELECTIVES | Elective (3) | Humanities Elective (3) Hist. and Soc. Sci. Elective (3) | Elective (3) Elective (3) Elective (3) | Liberal Arts Elective (3) | (1) bracketed number = courses credit (2) circled number denotes total credits for course area e.g. Science, English, etc. |
| PHYSICAL EDUCATION | Physical Education (1) | | | | |
| | Total Nursing Credits 36 Total Other Credits 21 | Total Nursing Credits 40 Total Other Credits 29 | Total Nursing Credits 34 Total General Credits 35 | Total Nursing Credits 36 Total Other Credits 31 | Total Nursing Credits 36 Total Other Credits 32 |

PART D: JOB DESCRIPTIONS FINDINGS

JOB DESCRIPTIONS

Findings:

- 1) Job descriptions used in Connecticut health care facilities vary from short, generalized, all-encompassing, non-specific (for the registered nurses, R.N.) to lengthy, well-defined, specific tasks lists (for the nurse's aide). Descriptions tend to decrease in length and specificity as the levels of knowledge, skill and judgment requirements increase.
- 2) Many of the tasks are performed by all three levels of nursing.
- 3) Nurses assistants' job descriptions have greater emphasis on patient care, comfort and safety as well as dietary tasks.
- 4) Registered nurses are responsible for supervision, patient care plans, handling drugs.
- 5) The duties of the licensed practical nurses, according to job descriptions, are very similar to the registered nurse.
- 6) A composite of checked tasks for each of the three levels listed in frequency order provides a summary job description. (see Appendix). This could provide a standard for curriculum analysis.
- 7) There are indications that gaps exist between what nursing personnel does in the health setting and what the job description says the person does. A job description is the employer's perception of what the employee must know and do for and with others in the prescribed setting. The description represents the employer's expectations of the employee - the employer's concept of the employee's role.
- 8) Job descriptions within health care facilities in Connecticut are not regularly reviewed and updated to reflect policy, personnel or organizational changes affecting the duties and responsibilities of personnel. Current job descriptions could affect curriculum offerings to help meet job requirements for that level employee in that community.
- 9) The use of the present job descriptions secured from the Connecticut health facilities for task analysis was not entirely satisfactory as a data base from which curriculum content could be matched and commonalities discovered. The fallacies of these job descriptions became evident during analysis.
- 10) Job descriptions are not a substitute for job task analysis unless, of course, the description resulted from a task analysis. Performance objectives based on a task analysis can provide a curriculum development base for individualized instruction while meeting employer standards. A task analysis instrument with five components: job skills, (observable) job knowledges, (related to job skills) behaviors, basic skills, and equipment--could provide data for analysis of commonalities between occupation and subsequent career ladder.
- 11) COMPOSITE DESCRIPTIONS of the AD-RN, LPN and NA have been compiled to simulate a sample job description as it might appear within Connecticut. Listing of the tasks was in the order of greatest-to-least frequency as they

were checked on the Connecticut health facilities job descriptions, using the UCLA TASK LIST. This composite might possibly serve as a guide for writing or updating job descriptions.

12) **INVENTORY OF 119 NURSING TASKS**
applied to Connecticut Job Descriptions, obtained from general hospitals and extended care facilities and the Curriculum of 3 levels of nursing education offered in Connecticut schools

| <u>No. of tasks appearing in:</u> | <u>NA</u> | <u>LPN</u> | <u>AD-RN</u> |
|--|-----------|------------|--------------|
| Conn. job descriptions | 74 | 89 | 81 |
| Conn. curriculum | 25 | 69 | 84 |
| Conn. job descriptions/not in Conn. curriculum | 47 | 28 | 18 |
| Conn. curriculum/not in Conn. job descriptions | 0 | 9 | 20 |

13) Although the materials from Connecticut were gathered, collated, computerized and analyzed, there was a growing discontent with the basic materials we had to work with, -- the submitted job descriptions from Connecticut health facilities' employers. At the joint committee meeting following Jan Danford's task analysis presentation, it was recommended that a trial survey be made of NA, LPN and AD-RN presently employed, using the original 306 UCLA TASK LIST to determine ease of conducting such an analysis. A Report is herewith contained.

14) The Northeastern University Allied Manpower Utilization study in the greater Boston Area Hospital (previous reference in Literature Review) reveals that a time-function analysis of the Nurses Aide and Licensed Practical Nurse indicates basic similarity in functions performed; differences between occupations, however, occur in the average time spent on different functions. Graphs visualizing time and function allocations appear in Appendix.

NURSING TASK INVENTORY
 APPLIED TO CONNECTICUT JOB DESCRIPTIONS
 WITHIN EXTENDED CARE FACILITIES AND GENERAL
 HOSPITALS

AND
 CURRICULUM OFFERED IN CONNECTICUT ON THREE
 NURSING LEVELS

UCLA. Task Inventory
 Items

Connecticut
 Job Descriptions from
 Extended Care Facilities and
 General Hospitals

Connecticut
 Curriculum

| | Connecticut Job Descriptions from Extended Care Facilities and General Hospitals | | | Connecticut Curriculum | | |
|--|--|--------|------|------------------------|-----------------|-----------------|
| | N.A. | L.P.N. | R.N. | N.A. Guidelines | L.P.N. Outlines | AD/RN Composite |
| 1) Assist and/or participate in occupational activities with patients | 1 | 0 | 1 | - | - | X |
| 2) Adjust side rails, height of bed, apply restraints | 20 | 6 | 2 | X | X | ✓ |
| 3) Dispose of contaminated materials, linen, equipment | 26 | 6 | 2 | - | X | X |
| 4) Apply and/or remove gown, mask; wash hands, and/or scrub | 14 | 9 | 2 | - | X | ✓ |
| 5) Assist patient with dressing, undressing | 22 | 4 | 1 | X | X | X |
| 6) Make patients' beds (occupied; unoccupied; anesthetic bed) | 34 | 9 | 1 | X | X | ✓ |
| 7) Assist patients with personal care (i.e. oral hygiene, bathing, backrubs, comb hair, shampoo, shaves, toe and fingernail care) | 43 | 22 | 21 | X | ✓ | ✓ |
| 8) Provide special skin care (i.e. for decubitus ulcers, patients in restraints, casts, comatose and semi-comatose patients) | 15 | 11 | 7 | - | X | ✓ |
| 9) Uses comfort devices (i.e. footboards, air rings, doughnuts, trochanter rolls, sandbags, alternate pressure mattresses, over-bed cradles) | 8 | 7 | 0 | X | X | X |
| 10) Assist patients to observe religious dietary restrictions | 0 | 0 | 0 | - | - | - |
| 11) Prepare and assist patient to see clergy, receive sacraments, assist in religious rites | 2 | 0 | 0 | - | X | - |
| 12) Assist patient to get in and out of bed, transfer from bed to chair | 27 | 9 | 1 | X | X | X |
| 13) Turn patient, place patient in correct body alignment | 18 | 10 | 1 | X | X | ✓ |
| 14) Assist patient in walking dangling | 22 | 6 | 2 | X | X | X |
| 15) Transport patient in wheelchair, stretcher | 40 | 11 | 1 | X | X | ✓ |
| 16) Set up and/or maintain traction | 12 | 1 | 2 | - | X | X |
| 17) Apply and/or remove braces | 1 | 0 | 0 | - | - | - |
| 18) Use mechanical devices (i.e. Hoyer lift) to move patients | 12 | 7 | 1 | - | - | - |
| 19) Operate Stryker, Foster frames and circle beds | 4 | 1 | 0 | - | - | - |
| 20) Assist patient following radical mastectomy | 0 | 0 | 0 | - | - | - |
| 21) Assist patient in Buerger's Exercise | 0 | 0 | 0 | - | - | - |
| 22) Prepare, give between meal nourishments (i.e. solid foods, liquids, fruit, etc.) | 31 | 5 | 4 | - | X | - |
| 23) Prepare food so patient may assist self | 30 | 9 | 5 | - | X | - |
| 24) Collect and serve food on trays | 25 | 7 | 4 | X | X | - |
| 25) Observe, measure, record food and fluid intake | 30 | 10 | 3 | X | X | X |
| 26) Feed patients (adults, infants, children) | 39 | 27 | 21 | X | X | X |
| 27) Assist patient in using bedpan, urinal, bedside commode, or going to the bathroom | 30 | 11 | 2 | X | X | X |
| serve, measure, record output | 31 | 10 | 3 | ✓ | X | X |

UCLA Task Inventory
Items

Connecticut
Job Descriptions from
Extended Care Facilities, and
General Hospitals

Connecticut
Curriculum

| | Connecticut | | | Connecticut | | |
|---|-------------|--------|------|-----------------|-----------------|-----------------|
| | N.A. | L.P.N. | R.N. | N.A. Guidelines | L.P.N. Outlines | AD/RN Composite |
| 29) Assist patient to turn, cough, deep breathe | 0 | 0 | 0 | - | X | X |
| 30) Set up and regulate humidifier | 0 | 0 | 0 | - | - | X |
| 31) Give artificial respiration | 0 | 3 | 8 | - | X | X |
| 32) Empty drainage bottles, bags, maintain drainage tubing without suction (i.e. urinary catheters, T-tubes) | 6 | 1 | 1 | - | X | X |
| 33) Collect and care for specimens (urine, stool, sputum), including proper delivery | 37 | 9 | 1 | X | X | X |
| 34) Give enemas | 34 | 9 | 2 | X | X | X |
| 35) Assist with and/or apply bandages, elastic stockings, non-sterile dressing, T dressing straight, breast, scapular, triangular sling binders; roller bandages, rib belts | 27 | 16 | 12 | X | X | X |
| 36) Assist and/or apply sterile dressings and bandages | 2 | 12 | 10 | - | X | X |
| 37) Assist with and or apply splints | 1 | 0 | 0 | - | - | - |
| 38) Apply defibrillator | 0 | 0 | 0 | - | - | X |
| 39) Apply ice bags, hot water bottle | 16 | 7 | 1 | X | X | X |
| 40) Apply heating pads, hypothermia | 3 | 1 | 0 | - | X | X |
| 41) Administer sitz bath, alcohol bath, medicated bath | 22 | 3 | 0 | - | X | X |
| 42) Apply therapeutic equipment (i.e. heat cradles) | 0 | 1 | 0 | - | X | X |
| 43) Apply infrared and ultraviolet lamps | 0 | 0 | 0 | - | X | X |
| 44) Take and record radial pulse, respiration | 36 | 26 | 25 | X | X | X |
| 45) Take and record temperature (oral, rectal, axillary) | 39 | 26 | 15 | X | X | X |
| 46) Take and record blood pressure | 16 | 23 | 10 | - | X | X |
| 47) Test urine for sugar, acetone | 24 | 5 | 1 | X | X | X |
| 48) Assist with and/or take EKGs | 1 | 3 | 2 | - | - | - |
| 49) Draw blood samples | 1 | 0 | 0 | - | - | - |
| 50) Observe, report, and/or record objective signs and symptoms of illness, disorder, body malfunctions, skin rashes, swelling, bleeding, patients' general physical and emotional condition. | 22 | 26 | 27 | - | X | X |
| 51) Observe, report and/or record positive or negative general behavior, physical appearance, or emotional responses to treatments, medication, nursing care (e.g. decreased bleeding, interaction with family staff; eating habits, increased or decreased communication, etc. | 5 | 27 | 33 | - | X | X |
| 52) Prepare patient care plan, identify problems and needs; suggest changes when indicated | 0 | 3 | 8 | - | - | X |
| 53) Record nursing care, accidents, unusual incidents; report same | 7 | 33 | 38 | - | X | X |
| 54) Read, obtain information from charts | 3 | 3 | 9 | - | X | X |
| 55) Talk with, obtain and give information to patients, family, staff (attend unit report) | 21 | 22 | 28 | - | - | X |
| 56) Record tests, treatments, procedures | 16 | 27 | 31 | - | X | X |
| 57) Record height, weight | 19 | 9 | 3 | X | X | X |
| Physicians' orders | 0 | 0 | 1 | - | - | X |



UCLA. Task Inventory

Items

Connecticut Job Descriptions from Extended Care Facilities and General Hospitals

Connecticut Curriculum

| | Connecticut Job Descriptions from Extended Care Facilities and General Hospitals | | | Connecticut Curriculum | | |
|---|--|--------|------|------------------------|-----------------|-----------------|
| | N.A. | L.P.N. | R.N. | N.A. Guidelines | L.P.N. Outlines | AD/RN Composite |
| 59) Teach patients, family, staff general hygiene in relation to prevention of illness, and promotion of health, rehabilitation activities of daily living | 5 | 8 | 27 | - | X | X |
| 60) Attend nursing care conferences | 14 | 22 | 30 | - | X | X |
| 61) Assist staff in giving nursing care | 0 | 0 | 0 | - | X | X |
| 62) Check working order of equipment | 13 | 1 | 1 | - | - | - |
| 63) Check working order of equipment, inventory emergency supplies, drugs | 1 | 7 | 13 | - | - | - |
| 64) Make recommendations for service or referral | 6 | 1 | 0 | - | - | X |
| 65) Maintain, store, clean, sterilize equipment or supplies, clean patient units | 44 | 14 | 7 | X | X | X |
| 66) Handle sterile equipment, sterile packs, pour sterile solutions | 1 | 0 | 0 | - | X | X |
| 67) Do sterile scrub, apply sterile gown, gloves | 1 | 0 | 0 | - | X | X |
| 68) Give general skin care to patients in traction | 0 | 0 | 0 | - | X | X |
| 69) Assist patient in range of motions; active and passive exercises | 3 | 1 | 0 | - | X | X |
| 70) Regulate and discontinue intravenous fluids and blood transfusions | 1 | 5 | 1 | - | - | - |
| 71) Administer nasogastric and gavage | 0 | 1 | 0 | - | - | - |
| 72) Administer gastrostomy | 0 | 2 | 0 | - | - | - |
| 73) Remove fecal impactions | 1 | 0 | 0 | - | - | - |
| 74) Administer and regulate oxygen mask, oxygen canisters; administer oxygen by means of positive pressure; administer oxygen tent; set up and regulate croupetts | 1 | 5 | 1 | - | - | - |
| 75) Give cardiac resuscitation (mouth-to-mouth), closed chest massage | 0 | 1 | 5 | - | - | - |
| 76) Suction patient's throat and nose passage; suction tracheotomy; remove and clean inner cannula of tracheotomy | 0 | 5 | 1 | - | X | X |
| 77) Maintain patient airway by means of tongue depressor or rubberized nose devices | 0 | 0 | 0 | - | - | - |
| 78) Assist patient with postural drainage | - | 1 | 0 | - | X | X |
| 79) Connect catheters and tubing to drain, insert urinary catheter; irrigate bladder | 14 | 9 | 5 | - | X | - |
| 80) Position, screen drape patient for rectal, vaginal, proctoscopic and other surgical and obstetrical procedures; assist physician with procedures | 2 | 19 | 24 | - | X | X |
| 81) Check, maintain drainage tubing with suction, e.g. chest gastric | 0 | 1 | 0 | - | - | X |
| 82) Instill solutions into eye, nose, ear, throat, bladder, vagina | 0 | 1 | 0 | - | X | X |
| 83) Irrigate wound, colectomy, stomach, eye, ear, throat, bladder, vagina | 1 | 10 | 2 | - | - | X |
| 84) Apply tourniquet | 0 | 0 | 0 | - | - | - |
| 85) Give vaginal (douche) | 0 | 4 | 0 | - | X | X |
| 86) Assist with somatic therapies, e.g. insulin shock treatment, electroconvulsive treatment | 0 | 0 | 0 | - | - | - |
| 87) Apply hot and cold packs, compresses, soaks | 10 | 6 | 1 | X | X | X |
| 88) Apply medical compresses, packs, soaks | 1 | 6 | 1 | - | - | X |

U.C.L.A. Task Inventory Items

Connecticut Job Descriptions from Extended Care Facilities and General Hospitals

Connecticut Curriculum

| U.C.L.A. Task Inventory Items | Connecticut Job Descriptions from Extended Care Facilities and General Hospitals | | | Connecticut Curriculum | | |
|---|---|-----------|-----------|---------------------------|--------------------|--------------------|
| | N.A. | L.P.N. | R.N. | N.A. Guidelines | L.P.N. Outlines | AD/RN Composite |
| 89) Prepare and administer oral, intramuscular, rectal, inhalation medication | 0 | 25 | 31 | - | X | - |
| 90) Count pulse: apical | 0 | 3 | 4 | - | X | - |
| 91) Count fetal heart tones | 0 | 1 | 0 | - | X | Y |
| 92) Do nose, throat, wound cultures | 0 | 0 | 0 | - | - | - |
| 93) Identify, interpret patients; needs, problems, signs, behavior symptoms related to physical, emotional, spiritual needs; identify approaches and/or solutions concerning problems and needs | 0 | 3 | 25 | - | - | X |
| 94) Teach patients, family, staff in relation to objectives of nursing care of current illness, convalescence, as well as the physician's plan of care including preventive measures, maintenance and promotion of health (i.e. nutrition, oral hygiene, vaccinations, prenatal and newborn care, etc.) | 0 | 3 | 22 | - | X | Y |
| 95) Assist physician with rounds to patients | 2 | 23 | 26 | - | - | X |
| 96) Assist with individual and group therapy | 2 | 0 | 4 | - | - | - |
| 97) Assist patients in preparation to crutch walk | 3 | 0 | 0 | - | - | X |
| 98) Assist patients in preparation for surgery, treatments, diagnostic studies | 5 | 5 | 9 | - | X | - |
| 99) Assist patients following amputations | 1 | 0 | 1 | - | X | X |
| 100) Start and regulate intravenous fluids, blood transfusions | 0 | 0 | 2 | - | - | Y |
| 101) Check for shock, hemorrhage, and/or other post-operative complications, Take required preventive measures | 0 | 7 | 10 | - | X | - |
| 102) Insert nasogastric catheters | 0 | 0 | 0 | - | - | - |
| 103) Give intravenous medications | 0 | 0 | 5 | - | - | X |
| 104) Read cardiac and fetal monitoring devices | 0 | 0 | 0 | - | - | X |
| 105) Read skin tests | 1 | 0 | 0 | - | - | - |
| 106) Take and repeat physician's verbal orders | 0 | 4 | 2 | - | - | X |
| 107) Transcribe physician's orders | 0 | 3 | 4 | - | - | - |
| 108) Take inventory of drugs | 0 | 5 | 8 | - | - | - |
| 109) Analyze nursing care requirements and report staffing needs | 0 | 3 | 7 | - | - | X |
| 110) Assist staff in patient care activities | 40 | 34 | 25 | - | - | Y |
| 111) Assign patients to team members; assign unit tasks to team members; supervise, evaluate and/or assist in evaluation of performance of staff members | 0 | 22 | 44 | - | - | X |
| 112) Initiate service or referral for patients | 0 | 5 | 13 | - | - | X |
| 113) Conduct nursing care conferences | 0 | 4 | 19 | - | - | - |
| 114) Coordinate patient care activities with other departments, e.g. physical therapy | 0 | 5 | 14 | - | - | X |
| 115) Supervise patient participation in activities e.g. dances, games | 4 | 3 | 2 | - | - | X |
| 116) Handle patient property and assume appropriate legal responsibility | 17 | 10 | 2 | - | X | X |
| 117) Provide and/or assist with post mortem care | 23 | 10 | 4 | - | X | X |
| 118) Prepare, and/or assist in preparation of trays, instruments, equipment | 17 | 15 | 16 | X | X | X |
| 119) Assist in the preparation of patient care plans, identification of problems and needs; test changes when indicated | 1 | 27 | 4 | - | - | X |
| Totals | 74 | 89 | 81 | 25 | 69 | 84 |

TRIAL SAMPLING OF UCLA 306 TASK LIST

Task:

At the suggestion of guest consultant, Jan Danford of Michigan Career Center during CIHMR Workshop, the joint committees (Curriculum and Job Description) recommended that CIHMR staff run a trial sampling among the NA, LPN, RN practitioners of the complete UCLA listing of 306 nursing tasks. The objective of this trial effort was to indicate the comparative ease of conducting a task analysis survey within the health care facilities to more accurately determine the actual tasks on the three levels as performed by the NA, LPN, and AD-RN. This testing instrument could be offered to the employees on the job, and could also be submitted to the educators for input. Perhaps, then, this sampling will whet the appetite for a full-blown, carefully executed task analysis project.

Procedure:

- 1) The 306 Task Lists were distributed to nursing directors or nursing education coordinators of five different size and type health facilities: Group I:- Hartford and St. Raphael Hospitals; Group II:- Middlesex Memorial Hospital; Group III:- University-McCook Hospital; and the Avery Nursing Home in Hartford. The educational institutions included Maloney High School for nurse's aide, Windham Regional Vocational Technical School for the practical nurse, and Mattatuck Community College for the associate degree nurse.
- 2) At the health facilities, 5 nurses' aides, 5 licensed practical nurses, and 6 registered nurses checked tasks required at each facility. In the schools, nursing instructors checked tasks required in their curriculum and offered suggestions for additional tasks.

Findings:

- 1) Check lists of tasks could be done easily within a health facility, once having enlisted the aid of the nursing director or educational coordinator.
- 2) Information is amenable to coding comparative analysis, and comparison.
- 3) This "quick and dirty" sample survey had obvious shortcomings for valid, reliable data: small sample size, inadequate instructions to survey participants, lack of control. Several nursing educators felt additional tasks should be included for a more complete task list for Connecticut. Sample included hospitals of varying size and complexity, and only one extended-care facility.
- 4) The small size of the Connecticut sample skews possible results; however, it is interesting to note in the summary of Tasks, all Connecticut nurse levels perform almost all tasks except two, in contrast to California's greater spread of tasks among all levels. Nurses Aides vary in responsibilities and skills re administration and communication. Connecticut NA curriculum partially covered the UCLA LPN tasks. Similarly, Connecticut curriculum for LPN spilled over to the UCLA RN tasks.

Conclusion: Objective of trial effort: determine ease of task analysis.
Refer #1 and #2.

SECTION FOUR--CONCLUSIONS

Based on the findings summarized in SECTION THREE, as discussed and interpreted by members and resource persons of the Committees as well as the consultants to the staff of the Nursing Articulation Study, the following conclusions have been drawn:

1. That a number of articulated nursing educational programs of varied nature presently exist throughout the country: NURSING ARTICULATION IS FEASIBLE AND PRACTICAL.
2. That a BODY OF BASIC KNOWLEDGE AND SKILLS, representing a COMMONALITY among the three levels of nursing considered, does exist (c.f. FINDINGS, SECTION THREE, PARTS C and D).
3. That this body of basic knowledge and skill may be so organized educationally that the individual can expand in depth and scope to a new level of competency.
4. That there is an unmet need in Connecticut for ALTERNATIVE PATHWAYS which should be available to meet individual educational needs, allowing for consideration and taking advantage of any pertinent prior education or experience. This will require some reconsideration and revision of the legal strictures pertaining to nursing education and licensure. It will also necessitate the institution of some new educational and accreditation procedures, as well as careful consideration regarding optimum utilization of extant resources and facilities. These alternative pathways should recognize the accelerating increase of adult education-seekers² and the need for a diversity of educational settings and environments to meet individual needs. The need for procedures for recognition of previous education and experience for persons in the nursing-related fields is evidenced by the data compiled by the State Department of Education, which reveal that 33 1/3% of students completing high school NA programs continue training towards health careers in full-time schools.
5. That the concern is not the place nor the age where and when nursing-related education occurs, but THAT IT DOES OCCUR.
6. That STANDARDS MUST BE AGREED UPON AND MET regarding the competency-level required for each of the nursing disciplines.
7. That there is a need for the establishment of appropriate CHANNELS FOR INTER-COMMUNICATION AND COLLABORATION among those persons and organizations sharing responsibility for or involvement with nursing and nursing education to promote the efficient improvement of nursing education and educational alternatives.

¹These members, resource persons and consultants included representatives of business, professional societies, various levels of the educational system, health facilities, task forces, regulatory bodies, and the legislature. These persons are knowledgeable in the areas of professional and technical nursing, medicine, public health, law, education, curriculum development, personnel, management training, administration, task analysis, publishing, audio-visual materials, computerization, and vocational instruction

²According to the findings of the soon to be published Carnegie Commission Report on adult education, approximately one in three of all adults (over the age of 18) in this country are pursuing some form of educational endeavor in established programs.

SECTION FIVE--RECOMMENDATIONS

PART A: INTRODUCTION

The following pages summarize recommendations for the implementation of an articulated system for nursing education. As an overview, we offer the "Maxwell Model" of commonalities among nursing responsibility levels, in knowledge, skill, and consequent responsibility (depth and scope), upon which an articulated educational system might be founded.

Most important among the recommendations which follow the "Maxwell Model" are those which pertain to the standardization of behavioral objectives and competency requirements for each of the nursing disciplines. Such standardization would facilitate educational and career advancement; it would also provide useful guidelines for health care delivery. If standardization were achieved (possibly, as we suggest, through a task analysis method), articulation would be readily implemented.

The second series of recommendations deals with aspects of an articulated system, some or all of which might be incorporated into a model; these include education by module, proficiency examination, "external degree", etc. Following is a series of recommendations pertaining to the NA training aspect of an articulated system: the rationale for a separate section of recommendations re the NA is that this area of training presently embodies the most variation and lack of standardization among the disciplines considered.

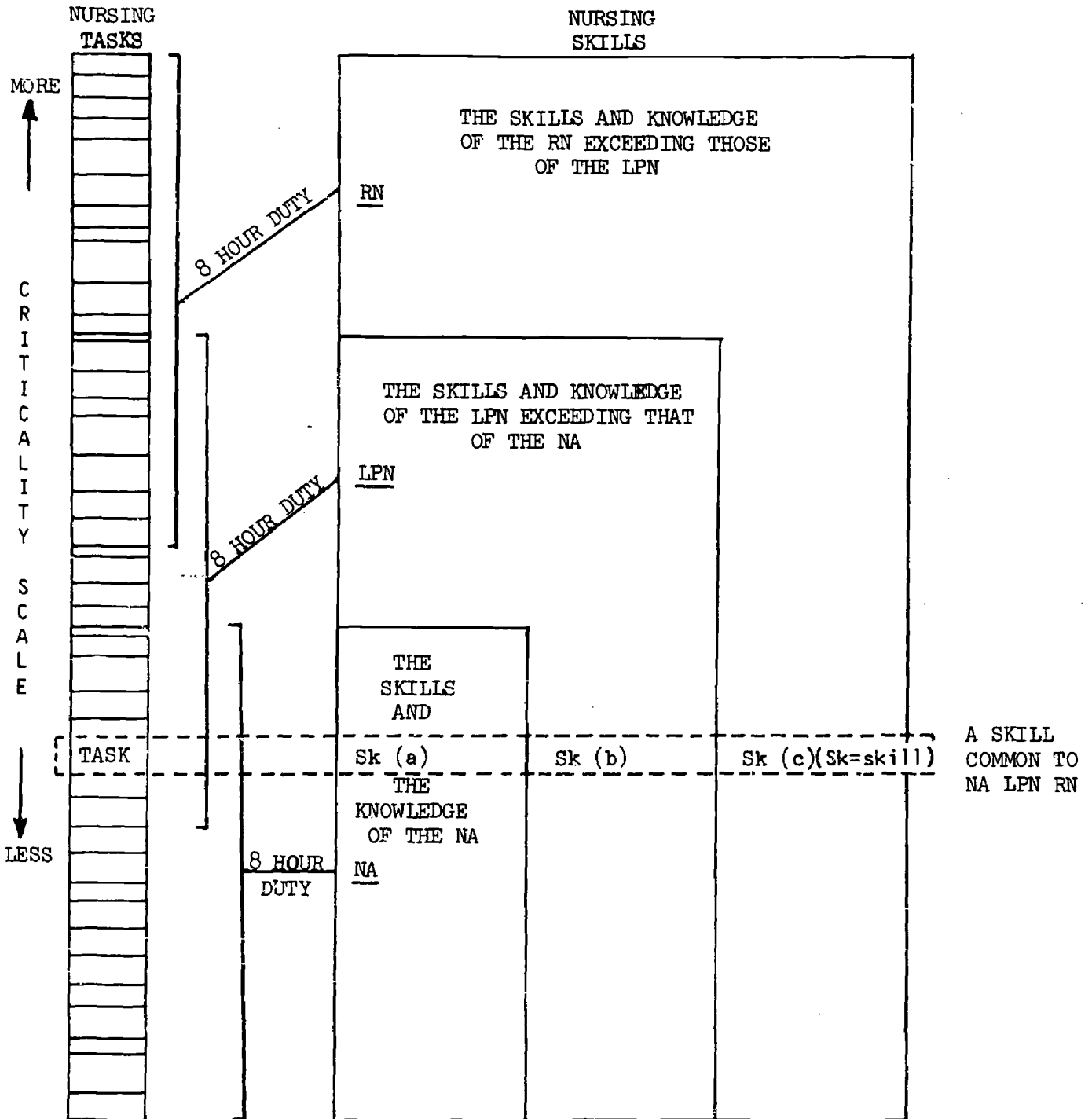
The next series of recommendations presents several experimental programs that might be launched within a flexible articulated system. A further section offers recommendations for new resources and new approaches to the utilization of extant resources and facilities to complement and expand nursing education.

Finally, suggestions for further study are offered, including recommendations for workshops and for the carrying out of a task analysis for nursing. It is hoped that the task analysis approach, including the performance objective assessment, will achieve an understanding among educational institutions, health care facilities, the student, the employer, and accrediting bodies for crediting the student for what she/he knows.

THE MAXWELL MODEL

This diagram of a model for articulation of the three levels of nursing (NA, LPN and RN) was conceptualized by Committee Member ROBERT B. MAXWELL, Assistant Vice President of Personnel and Director of Manpower Planning and Development, the Hartford Insurance Group.

CONCEPTUAL MODEL
OF
COMMONALITIES
OF
SKILLS AND KNOWLEDGES
AMONG
THREE LEVELS OF
NURSING



DUTY TRUNCATES--In a work day, the person can perform just so much work--higher qualification relieves of lesser duties, but the person still must be able to perform those lesser duties.

KNOWLEDGE ACCUMULATES--Higher qualification includes all knowledge gained by those lesser qualified.

THE "MAXWELL MODEL"

The above chart, presenting for NA, LPN, and RN the relationship between the duties performed and the knowledge necessitated by that responsibility, is founded on two premises relating to the ascending ladder of nursing responsibility levels: (1) duty truncates; and (2) knowledge accumulates incrementally. In other words, given the limitations of an eight-hour work day, the RN will relegate to the LPN and the LPN to the NA certain duties which she herself must be able to perform, but which she may not have time to deal with because of a necessary priority on higher-responsibility tasks. The duties which a nurse at a higher responsibility level will delegate "downwards" will be those duties which the LPN or NA has the necessary skill and knowledge to perform. Regarding the second premise, it is because of the incremental accumulation of knowledge in nursing education that this vital duty-truncation is possible. For example, a NA may learn as part of her training a basic nursing skill, such as the giving of an alcohol backrub. This skill, at the level at which it is performed by the NA is complete in its importance to patient well-being and comfort; however, the LPN performing the same duty will have acquired an increment of knowledge sufficient for her to recognize and report, perhaps, an anomaly that becomes apparent in the course of the administration of the backrub. Finally, the RN performing this duty will have acquired an additional knowledge increment such that she may be able to institute therapy for the recognized anomaly. Thus, because knowledge accumulates incrementally starting from a common skill/knowledge base (a nurse at a higher responsibility level must retain the ability to perform tasks that she will not ordinarily be called upon to perform), it is possible for duties to truncate such that the most efficient manpower utilization is possible.

Thus, nursing knowledge increases not only "vertically" in terms of new information, but also "horizontally" in terms of a widened scope relating to a basic duty. The implications this model suggests for the educational process are clear. If STANDARDS can be established for the quantity of skill/knowledge-training necessary for each of the disciplines (NA, LPN, and RN), then transferability of credit for training programs can become a reality; programs can be designed such that a skill/knowledge base can be taught at the NA level and modules of increments (c.f. "a", "b", and "c" on chart) can be added at appropriate points for the training of LPNs and RNs. The education process for the RN becomes an accumulation of knowledge necessary to perform the work of the NA, LPN, and RN. The relative status of the LPN, having acquired additional knowledge over the NA, and the position of the RN in terms of having had to acquire additional knowledge and skills provides a method of evaluation of the three positions that should lead to a possibility of job evaluation and salary administration relating to the knowledge, skill, and accountability of the three positions.

RECOMMENDATIONS: re STANDARDIZATION of training levels and requirements for competence

(NOTE: It is here to be pointed out that one recommended mode of arriving at the standards or norms discussed in these recommendations would involve the TASK ANALYSIS procedure described in the final subsection of 5A).

It is recommended:

- 1) That the specific COGNITIVE AND BEHAVIORAL OBJECTIVES of the three levels of training should be constructed, taking into consideration the commonalities in the findings of this report (c.f. models: California, Arizona).
- 2) That CRITERION REFERENCE TESTING (a test of performance requiring 100% accuracy, as differentiated from a grade-on-the-curve, minimum passing standard type of test) should be used based on BEHAVIORAL OBJECTIVES set up and specifically defined.
- 3) That GOALS as well as individual task behavioral and cognitive objectives should be spelled out.
- 4) That requirements for NA, LPN, and AD/RN nursing should be satisfiable through EXAMINATION and PERFORMANCE EVALUATION. Accredited schools may be used.
- 5) That the preparing institution should certify on the basis of PERFORMANCE the competence of the person who has been trained.
- 6) That job performance standards be promulgated and ratified by the Department of Education in conjunction with the Commission on Higher Education and the Nursing Board of Examiners, which would define job characteristics and skills required for each of three levels of nursing care--RN, LPN, and NA. That health employers and the nursing profession be consulted re: standard setting.
- 7) That all accredited schools conform with these standards in terms of courses and subject matter and that certificates be awarded upon attainment of these skills as reflected by completed coursework.
- 8) That these certificates be made a prerequisite for any licensing by the Board of Nursing Examiners of either registered or licensed practical nurses.
- 9) That alternative methods for certification and subsequent licensure be investigated in order to allow for recognition of skills acquired through experience, and to provide for expeditious movement from one level of nursing to another.
- 10) That all employers in the state of Connecticut be urged to abide by and honor such certification in employment practices, particularly with respect to the presently unlicensed NA job level.

Certification, as opposed to legal licensure, is recommended. Present legal requirements do not mandate that the NA category be licensed, as is the case with RN and LPN categories.

RECOMMENDATIONS: re aspects of articulated programs; ALTERNATIVES toward implementation

We recommend the implementation of ARTICULATION of education and training that will minimize the now so prevalent requirement of repetition of formal education in order to advance within a field or to move to another field within the health family. NAs, LPNs, and RNs should have no overlaps in courses; the courses should be additive. The nursing jobs open at each of these junctures should be different in the level of skill and knowledge required and in the extent of responsibility exercised, considering both depth and scope of knowledge.

It is recommended:

- 1) That LEARNING BY MODULE be implemented so that programs can offer individualized learning instruction. (see LEGS p.)
- 2) That CREDIT BY EXAMINATION for "what one knows and can do" should be encouraged for the nursing programs throughout Connecticut.
 - a) That a statewide REVIEW be made of present crediting procedures for nursing within public and private education institutions and health care facilities.
 - b) That the various tests presently administered in Connecticut and elsewhere be secured and examined by a committee charged with making recommendations.
 - c) That these recommendations be presented at an EDUCATIONAL TESTS UTILIZATION WORKSHOP attended by persons responsible for administering tests granting credit.
 - d) That a PUBLISHED REPORT be made for wide distribution of the results of the Utilization Workshop--this report to include basic information concerning a variety of tests.
- 3) That the current Connecticut "EXTERNAL DEGREE" LEGISLATION be studied to determine implications for nursing articulation.

*That a study of the NEW YORK STATE "EXTERNAL DEGREE" NURSING PROGRAM be undertaken for consideration for use in Connecticut. It is suggested that the initial contact be made during the Articulation Study be maintained with New York State Education Department through Dr. Mildred Schmidt, Executive Secretary, State Board of Nursing and Administration, Nursing Education Unit, Division of Professional Education; and C. Wayne Williams, Chief, Bureau of Independent Study Programs Development in Albany.
- 4) That, to promote flexibility, the arbitrary TIME REQUIREMENTS should be removed in recognition of differences of students' individual abilities through previous work and academic experiences, validated by examination. Revision of time requirement rigidity for duration of a program will insure maximum opportunity for recognizing previous education and experience.
- 5) That a student be offered a variety of clinical training to better prepare her/him for the numerous employment settings available upon completion of training. Arrangements can be made for STUDENT ROTATION THROUGH CLINICAL FACILITIES for varied experiential training.

- 6) That some mechanism be provided to monitor the AVAILABILITY OF JOBS for students upon completion of programs, i.e. Health Job Bank.
- 7) That a regular review of programs offered in relationship to job availability also include elimination of programs if the situation warrants.

RECOMMENDATIONS: re nursing assistant

It is recommended:

- 1) That the guidelines for NA courses be updated to reflect course and behavioral objectives, curriculum content, and criterion testing capable of producing a student acceptable for employment upon completion of the course or acceptable to the educational institution to which she/he applies for further study. The STANDARDS set in the guidelines can then serve as an identifiable level of educational achievement toward a nursing career. The updating will stimulate a general raising of standards among the educational institutions and create goals for self-improvement of weaker programs. The setting of program standards could assist institutions in determining the acceptability of transfer credit.
- 2) That greater attention be given to the clinical training of NAs towards the goal of making them fully employable at the completion of the course. This would require a block time-period of clinical concentration to substitute for the present two hour weekly arrangement; this could also be scheduled for after-school hours, weekends, or vacations. Full credit should be given for on-the-job training associated with the course. The program must also allow for the meeting of academic standards.
- 3) That a series of NA programs be offered to meet the needs of the adult working student in the extended care facilities; this program to be articulated with the LPN course--AD/RN for an articulated work-study program. This anticipates the thrust of the Carnegie Commission Continuing Adult Education Report which will show that one of three adults continue formal education. The unanticipated response to Red-Cross non-credit nursing aide programs evidences a need for nursing home NA training. A growing NA market for employment is among the newer proprietary home nursing services, i.e. Upjohn Homemakers Inc.

RECOMMENDATIONS: for experimental programs

It is recommended:

- 1) That a HEALTH CAREERS ORIENTATION PROGRAM be offered within the high school for an overview of this field, with sufficient exposure through exploratory "hands-on" experiences to allow the student the choice of a health career (c.f. New Jersey and Oregon programs--Orientation to Health Occupations course).
- 2) That an experimental articulation model be developed in the Greater Hartford High Schools which could include the ORIENTATION TO HEALTH OCCUPATIONS COURSE in the 10th grade, a revised NA course in the 11th, and an experimental LPN program in the senior year, leading to entry in the AD/RN program in the community college; that efforts of the TACT program in the high schools and those of Manchester Community College be included in the experimental model; that a clinical training program be rotated through Hartford, Mt. Sinai, St. Francis and McCook Hospitals.
- 3) That an experimental LPN program be presented in a high school setting.
- 4) That an experimental LPN program be presented in the community college as the first year of the two-year AD/RN program.
- 5) That the well-developed three-level articulated model for nursing education developed by Arizona be explored for possible application in Connecticut. The two-year program equals:
 - 1st six months--NA
 - plus next six months--LPN
 - plus next year--AD/RN.
- 6) That Area F Commission for Higher Education (Bridgeport, Stamford, etc.) indicated interest in participating in an experimental articulated nursing program with the community colleges, hospitals, and local Comprehensive Health Planning B Agency. Recommendations of this study are to be developed for an articulation model in that part of the state.
- 7) That LEGS (Learning Experience Guides for Students), a total curriculum plan and learning system based on individualized instruction, be seriously considered as an alternative approach or supplemental program to an established program. (A self-instructional package of four volumes developed by nursing educators, LEGS includes behavioral objectives, learning experience using coordinated audio-visual components, and self-tests for student evaluation. The objectives build on prior knowledge, show commonalities, and encourage review. The multi-media system includes slides, cassettes, and games in addition to the Learning Experience Guides and Teachers' Resource Books. Used in career ladder programs--LPN and AD/RN).
- 8) That the representatives of the Division of Vocational Education and the State Department of Health, MEDHIC Program select several veterans for participation in a tailor-made nursing articulation sequence. This would include testing, credit for previous service training and experience, waiver of educational time requirements, arrangement for ancillary services and flexible admissions procedures to higher education.

RECOMMENDATIONS: resources and facilities to be utilized/developed

It is recommended:

- 1) That geographical AREA RESOURCE PROFILES FOR NURSING be inventoried to include the following information: demographic data; present levels of employed nursing personnel, job-seeking nurse applicants; actual job openings; nursing-related educational programs offered by various institutions, including public and private education and health facilities; available equipment, faculty, number of students/graduates, time availabilities, financial sources and arrangements, etc. Profiles should include information re future plans for areas which may influence supply/demand for nurses and their educational needs (e.g. opening of a new wing in a hospital). Also included should be notations of existing collaborative programs and cooperative contractual arrangements.
- 2) That a HEALTH CAREERS LEARNING RESOURCE CENTER be developed: a multi-media center including closed-circuit television, videotape equipment, and illustrated audio tests, films, cassettes, etc.
 - a) That from this Resource Center lists of available materials should be compiled and distributed to all nursing education programs.
 - b) That loan arrangements for expensive current materials could facilitate greater use of the latest developments within the field.
 - c) That TEACHERS' WORKSHOPS be held for utilization of available current media for training sessions on effective presentation, for exchange of information.
 - d) That inter-institutional sharing of resources be encouraged--c.f. arrangements made by Midwestern University, Texas with the Air Force School of Health Care Sciences.



RECOMMENDATIONS: for further study

It is recommended:

- 1) That a series of CONSULTANT WORKSHOPS be held immediately to continue the exchange of information and experience with out-of-state professionals actively participating in programs and with those persons in Connecticut responsible for development, presentation, and decision-making re: the various levels of nursing; that these workshops serve as the vehicle for bringing together diverse interests to share current thinking, attitudes, and development in nursing education, and to offer the opportunity to discuss and recommend activities for the State.
- 2) That an INSERVIGE WORKSHOP be held as early as this summer to exchange information and changes with program instructors, demonstrate audiovisual aids, share new developments in the field, participate in problem-solving and problem-sharing. Follow-up review and reinforcement sessions can stimulate activity and esprit de corps among nursing instructors and subsequently their students.
- 3) That special attention be given to GUIDANCE COUNSELOR WORKSHOPS to increase awareness and knowledge of the health field, particularly nursing opportunities, requirements, problems, to foster an understanding of articulation, credit-by-examination, alternate pathways. SEMINARS throughout the year could supplement and reinforce counselling knowledge and activities.
- 4) That COMBINED WORKSHOPS for inservice training of guidance counselors, teachers, supervisors and coordinators serving NA, LPN, AD/RN nursing programs in the education and health care facilities settings. A better understanding of the various components, each other, the nursing programs and the current learning materials will contribute to effective articulation and coordination.
- 5) That a TASK ANALYSIS of the three levels of nursing (NA, LPN and AD/RN) be undertaken to provide a division of tasks into manageable "functional areas," to provide for arrangement of tasks by frequency of performance and by criticality. Task analyses will have varying utility: for the educator, it will indicate curriculum design; for the employer, it is essential for job descriptions prepared to reflect realistic expectations of the employee; for the student, it will provide performance objectives. The task analysis approach to education includes modular learning: the sum total of a number of modules composes a complete curriculum content for one level; the learning module can be assessed by other programs and institutions to enable the student to move freely within these areas.

That the examination of task programs, such as those of UCLA and Northeastern University, be undertaken by a Committee for appropriate changes for Connecticut; that a survey of tasks with a suitable tool be administered by a trained group of interviewers visiting health facilities to observe and interview present practitioners; that this interviewing could be accomplished within a period of six weeks if, according to the Michigan Career Center Consultant (Jan Danford), proper organization and training preceded the interview.

It is recommended that Jan Danford be contracted to work with the project from its inception through the collation of material, translation of results into behavioral objectives for the program, and program prescriptions for the students.

SECTION FIVE - RECOMMENDATIONS

PART B: INTRODUCTION

Articulation of nursing and nursing-related programs within a community requires the establishment of appropriate channels for intercommunication and collaboration among the following:

- 1) Organizations and agencies sharing responsibility for nursing educational programs (the State Department of Education, Division of Vocational Education; the Board of Examiners for Nursing; the Commission for Higher Education; the professional accrediting bodies).
- 2) Health care facilities (hospitals, clinics, convalescent and nursing homes, private or group-practice offices, etc.).
- 3) Educational institutions (high schools, vocational/technical schools, community colleges, universities).
- 4) Specialized groups and agencies (funding sources, planning agencies, professional health organizations, community councils, "consumers", etc.).

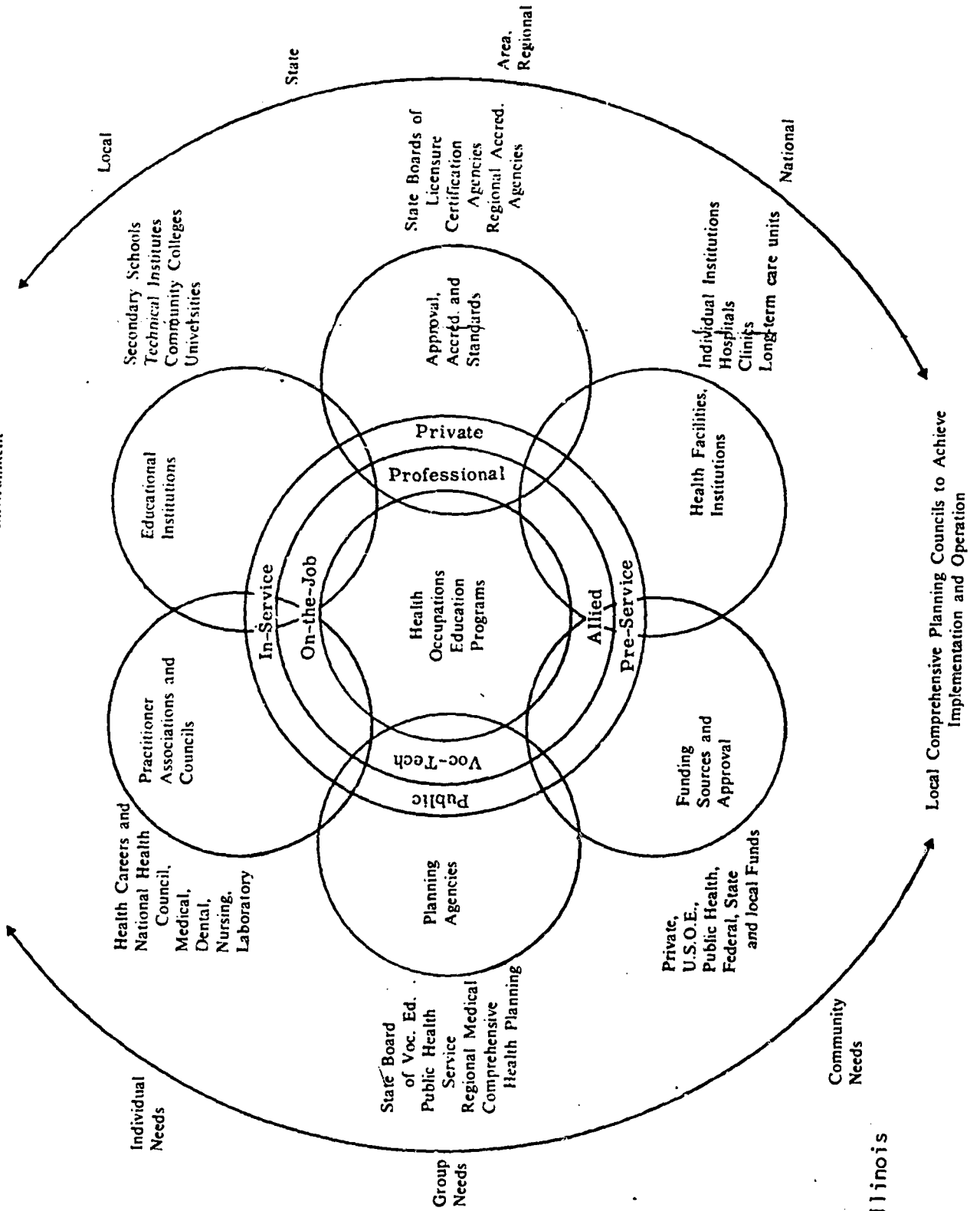
The following chart schematizes the sort of involvement and interaction that is necessary among these groups to coordinate health occupations education programs.

It must be emphasized that the "include-me-in syndrome" (the thrust for participation in problem-solving by all involved and affiliated groups) need not and should not be a matter of rival claims or competition among organizations. The implementation of nursing articulation requires a co-operative sharing of strengths among all involved groups. For example, the Division of Vocational Education of the State Department of Education, as the legal agent for receiving and administering federal vocational funds, is in a particularly advantageous position to facilitate articulation of programs within and among institutions. Coordination and articulation of programs at the secondary and post-secondary levels are essential to making the best possible use of resources and to providing educational opportunities to a greater range of individuals.

The strengths of institutions of and relating to higher education, rather than "rivaling" those of secondary education, can be seen to complement them. Federal funds are available for the upgrading of existing collegiate nursing programs. The rising need for professional nurse specialties at high responsibility levels can be met within such collegiate programs; and these programs ideally must be articulated with all supporting training levels. Similarly, the unequivocal need for clinical emphasis in the training of all health professionals suggests the highly important role of health care facilities in nursing articulation; and other groups too have their unique offerings to make to the process.

Thus, articulation of nursing education should serve not only to upgrade and standardize nursing educational programs and insure high quality health care delivery; it should also foster collaboration among all involved parties to mutual benefits. The following recommendations suggest approaches to and aspects of such collaboration.

Components for Coordinating Health Occupations Education Programs
Social — and — Economic — Environment



Courtesy of:
University of Illinois

RECOMMENDATIONS: re coordination of involved organizations and agencies

It is recommended:

- 1) That a statewide coordinating council be formed to facilitate exchange among other units with a common interest. Specific activities should be pursued on the state and local levels to gain coordination among institutions and programs. Articulated relationships could involve:
 - a) staff members on cooperative or joint appointment at secondary and post-secondary institutions;
 - b) use of common facilities, such as counseling rooms and classrooms at the clinical facility, by both secondary and post-secondary programs;
 - c) joint and coordinated guidance programs;
 - d) awarding credits and diplomas, by each institution in a manner that meets requirements for the next level program;
 - e) preparatory programs that start in secondary school and continue to completion at post-high school institutions;
 - f) advanced standing in post-secondary programs for competencies gained through secondary-level programs or actual work experiences.

AND/OR

- 2) That a Council should be convened of those who share responsibility for nursing education (the State Department of Education, the Commission for Higher Education and its several components, the Board of Nursing Examiners, health care facilities, the nursing profession, and the State Health Department):
 - a) to conduct task and occupational analyses under joint auspices;
 - b) to arrange for an Area Resources Study for full information on clinical training possibilities within specific geographical areas. This could include private physicians' offices, clinics within local health departments, voluntary agencies, schools, day care centers, and nursing homes, as well as hospitals (the educational programs have been listed in the CIHMR publication, the 1973 Health Careers in Connecticut Education and Training Programs--see appendix);
 - c) to arrange for training experiences to articulate with educational programs on a rotating basis in a wider community setting to permit the student a variety of experiences. Yearly contractual arrangements between educational institutions and health care facilities could provide an important link for articulating the education and training components with mutual understanding and agreement on standards, supervision, resources, and responsibilities;
 - d) to develop well-defined relationships between the educational institution and clinical affiliates for achievement of educational objectives.

Formalized agreements between the responsible educational institution and the cooperating clinical facility should include a joint development of the agreement; elaboration of responsibilities and authority of each party; annual review; beginning and terminal dates; assurance that the responsible institution has full responsibility for students' learning experience including their selection and supervision; provisions for coordinated planning between faculty of program and representatives of clinical facility; definition of the types and length of learning experiences to be provided by clinical facility, as well as services available (library, laboratory, conference and classrooms, equipment, supplies);

- e) to appoint those persons responsible for developing curriculum on each of the levels to an INTER-CURRICULUM TASK FORCE FOR ARTICULATION to examine closely the content and junctures between and among levels for specific program fit. This interrelationship will help avoid curriculum duplications and reveal gaps; it will be invaluable in assuring quality and quantity of content in courses which bear similar but not identical names from one institution to the other. Student transfer from school to school as well as level to level would be facilitated with no loss of credits and greater understanding by the instructor of what was previously learned. This task force should examine the varied approaches to curriculum of articulated models elsewhere, e.g. one model which qualifies a student as a NA at the completion of first semester, LPN at the completion of first year, and RN at the completion of the second year. Although this ladder is set in a community college setting, the philosophy, goals and objectives could be adapted for use in other educational settings (see appendix).

AND/OR

- 3) That the Connecticut State Advisory Council on Vocational Education appoint a specific ADVISORY COMMITTEE FOR NURSING PROGRAMS. Committee membership should include representatives from the nursing profession and the various professional associations; educational institutions, health facilities, health interest groups, citizens' interest and civic groups, health-related agencies. As advisory to the educational programs, the Council committee can help coordinate activities among health care educational and employing institutions. Specifically, it can serve as liaison among the educational programs and the community; can assist with continuous evaluation of the program; and can help identify and create job opportunities for trainees.
- 4) That LOCAL NURSING COMMITTEES of the present vocational education advisory groups be formed with area membership representation similar to that of the State Council Committee. Also to be included are manpower agencies, health planning groups, guidance personnel, civic and government agencies. The committee could provide information for local decision-making, determine priorities, and serve a public education function for the local nursing programs.
- 5) Lastly, that effective articulation of health educational programs involving interrelationships of numerous components on several levels requires a commitment to this overall goal on the part of responsible leadership.

APPENDICES

| | |
|---|----|
| Directory of NA, LPN and AD/RN Programs in Connecticut..... | 70 |
| Guidelines for Training NA's..... | 73 |
| Philosophy and Objectives of Practical Nurse Education..... | 79 |
| NECHEN Report on LPN and AD/RN..... | 82 |
| Rules and Regulations: LPN and AD/RN..... | 83 |
| Comparison of Curriculum Content: LPN and AD/RN..... | 84 |
| Arizona Articulated Nursing Program..... | 88 |
| Composite Descriptions: NA, LPN and AD/RN..... | 90 |
| Time-Function Graphs: NA and LPN..... | 96 |
| Task Analysis Consultant Correspondence..... | 98 |

DIRECTORY

1972-1973 CONNECTICUT HIGH SCHOOL NURSING ASSISTANT PROGRAMS

CONNECTICUT STATE DEPARTMENT OF EDUCATION
Division of Vocational Education

Mr. Errol Terrell - Chief, Bureau of Vocational Services
Tel. No. 566-5128

Dr. Claire Reinhardt - Consultant, Health Occupations
Tel. No. 566-4723

| | | |
|--|---|---|
| ANSONIA Ansonia High | HAMDEN Hamden-New Haven Cooperative Center | NORWALK Brien McMahon High |
| BLOOMFIELD Bloomfield High | HARTFORD Bulkeley High Hartford High Weaver High | RIDGEFIELD Ridgefield High |
| BRANFORD Branford High | HEBRON RHAM High Regional School District #8 | SHELTON Shelton High |
| BRIDGEPORT Bassick High Central High Harding High | LITCHFIELD Wamogo Regional High Regional School District #6 | SOUTHINGTON Southington High |
| DANBURY Danbury High | MANCHESTER Manchester High | STAMFORD Stamford High Rippowam High Westhill High |
| DERBY Derby High | MERIDEN Maloney High Platt High | THOMASTON Thomaston High |
| ENFIELD Enfield High Fermi High | NEW BRITAIN New Britain High | WALLINGFORD Lyman Hall High |
| GROTON Fitch Senior High | NEW HAVEN Hillhouse High Lee High | WATERTOWN Watertown High |
| GUILFORD Guilford High | NORTH HAVEN North Haven High | WEST HAVEN West Haven High |
| | | WINDSOR Windsor High |

| | | | | | | | |
|-------------------------------------|--|--------------------------------|------|--------|--|--------------------|-------------|
| St. Raphael Hospital | 8 weeks of academic and on-the-job training. Training begins at various times of the year | H.S. Diploma (with exceptions) | None | 8-10 | None Dormitory facilities not available | \$2.50 per hour | Certificate |
| St. Vincent Hospital | 6 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma | None | 15-20 | None Dormitory facilities not available | \$2.25 per hour | Certificate |
| Sharon Hospital | 5 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma | None | 10 | None Dormitory facilities not available | \$2.22 per hour | Certificate |
| Stanford Hospital | 8 weeks of academic and on-the-job training. Training begins at various times of the year | H.S. Diploma | None | 10 | None Dormitory facilities not available | \$438.75 per month | Certificate |
| Uncas-on-Thames Hospital | On-the-job training. Training begins at various times of the year | H.S. Diploma | None | 1 or 2 | None Dormitory facilities not available | \$659 per month | None |
| V.A. Hospital - Newington | 6-10 weeks of academic and on-the-job training. Training begins at various times of the year | H.S. Diploma | None | 3-6 | None Dormitory facilities not available | \$450 per month | Certificate |
| V.A. Hospital - West Haven | 12 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma (with exceptions) | None | 10-15 | None Dormitory facilities not available | \$2.50 per hour | Certificate |
| Windham Community Memorial Hospital | On-the-job training. Training begins at various times of the year | H.S. Diploma | None | 10-15 | None Dormitory facilities not available | \$304 per month | None |
| Yale-New Haven Hospital | 3 weeks of academic and on-the-job training. Training begins at various times of the year | H.S. Diploma | None | 20 | None Dormitory facilities not available | \$494 per month | None |

| OCCUPATION | INSTITUTING AGENCY | NATURE OF PROGRAM | ENTRANCE REQUIREMENTS | AFFILIATED AGENCIES | AVERAGE TUITION CLASS AND SIZE | STIPEND OR TRAINING WAGE | CREDENTIALS EARNED |
|---|--|--|-----------------------|---|---|--------------------------|--------------------|
| NURSE, LICENSED PRACTICAL * (Licensed Vocational Nurse) 079.378 | Henry Abbott Regional Vocational Technical School* | 4 months of academic and 8 months of clinical training | H.S. Diploma | Danbury Hospital | 20 None Dormitory facilities not available | None | Certificate |
| | Ballard-Havens Regional Vocational Technical School* | Same as above | H.S. Diploma | Bridgeport Hospital, St. Vincent's Hospital | 25 None Dormitory facilities not available | None | Certificate |
| | E.C. Goodwin Regional Vocational Technical School* | Same as above | H.S. Diploma | Yale-New Haven, St. Raphael Hospitals | 45 None Dormitory facilities not available | None | Certificate |
| | W.F. Kaynor Regional Vocational Technical School* | Same as above | H.S. Diploma | Waterbury and St. Mary's Hospitals | 52 None Dormitory facilities not available | None | Certificate |
| | Norwich Regional Vocational Technical School* | Same as above | H.S. Diploma | William W. Backus Hospital | 23 None Dormitory facilities not available | None | Certificate |
| | A.I. Prince Regional Vocational Technical School* | Same as above | H.S. Diploma | Hartford, St. Francis Hospitals | 20 None Dormitory facilities not available | None | Certificate |
| | Vinal Regional Vocational Technical School* | Same as above | H.S. Diploma | Middlesex Memorial Hospital | 24 None Dormitory facilities not available | None | Certificate |
| | Eli Whitney Regional Vocational Technical School* | Same as above | H.S. Diploma | New Britain General, Bristol Hospitals | 75 None Dormitory facilities not available | None | Certificate |
| | H.C. Wilcox Regional Technical Vocational School | Same as above Proposed program (Feb. 1973) | H.S. Diploma | | 20-25 None Dormitory facilities not available | None | Certificate |

| Windham Regional Vocational Technical School* | 4 months of academic and 8 months of clinical training | H.S. Diploma | Windham Community Memorial and Day Kimball Hospitals | 40 | None Dormitory facilities not available | None | Certificate |
|--|--|--------------|---|-------|--|------|-----------------------------|
| J.M. Wright Regional Vocational Technical School* | Same as above | H.S. Diploma | Norwalk, Stamford, and St. Joseph Hospitals | 30 | None Dormitory facilities not available | None | Certificate |
| Manchester Community College (<i>proposed</i>) | 24 months of academic, laboratory, and clinical training (proposed program) | H.S. Diploma | Hartford Hospital | 30 | \$141.50 per semester Dormitory facilities not available | None | Associate in Science Degree |
| Mattatuck Community College | 2 years of academic, laboratory, and clinical training | H.S. Diploma | Waterbury, St. Mary's, and Charlotte Hungerford Hospitals | 80 | \$100 plus fees per semester Dormitory facilities not available | None | Associate in Science Degree |
| Mobegan Community College (<i>approved for Sept 1973</i>) | 5 semesters of academic and laboratory training. (<i>proposed program</i>) | H.S. Diploma | To be determined | 25-40 | \$141.50 per semester Dormitory facilities not available | None | Associate in Science Degree |
| Norwalk Community College | 2 years of academic, clinical and laboratory training | H.S. Diploma | Norwalk, St. Joseph, Fairfield Hills, and Stamford Hospitals | 60 | \$100 plus fees per semester Dormitory facilities not available | None | Associate in Science Degree |
| Quinnipiac College, School of Allied Health and Natural Sciences | 2 years of academic, laboratory and clinical training | H.S. Diploma | Gaylord, Waterbury, West Haven V.A. and Meriden-Wallingford Hospitals | 50 | With dorm: \$2,750 yearly Without dorm: \$2,100 yearly | None | Associate in Science Degree |
| University of Bridgeport Junior College* | 24 months of academic, laboratory and clinical training | H.S. Diploma | Fairfield Hills and Bridgeport Hospitals | 75-80 | With dorm: \$3,250 yearly Without dorm: \$2,050 yearly | None | Associate in Science Degree |

*Programs identified by asterisk are approved by state authorities as reported for the United States by the National League for Nursing, New York, New York 10019 and listed in the American Hospital Association's Guide To The Health Care Field (August 1972).



CONNECTICUT STATE DEPARTMENT OF EDUCATION
Division of Vocational Education

GUIDELINES FOR TRAINING NURSES' AIDES

I. Introduction:

The need for establishing a training program for Nurses' Aides in the Hartford area was expressed by the Connecticut State Employment Service. This training program is to be organized under the provisions of the Manpower Development and Training Act of 1962. The Connecticut Board of Examiners for Nursing, the Connecticut Health Department, the Connecticut Nurses' Association, and the Connecticut Department of Vocational Education recognized this need and prepared these guidelines for developing training programs for Nurses' Aides.

Nurses' Aides should be prepared for their duties by a planned program of training. The registered professional nurse and the licensed practical nurses constitute the legally recognized nursing practitioners who have been prepared through state accredited pre-service programs. The responsibilities of each are defined in Section 20-93 to Section 20-98, Connecticut statutes.

Because of the variety of personnel involved in the health care of the public and to avoid confusion in the minds of patients and the public, all workers should be identified. Nursing care personnel is limited to three categories: the registered professional nurses, the licensed practical nurses and the nurses' aides.

II. Definition of Responsibilities:

The registered professional nurses are responsible for the total management of the nursing care of patients, and one of their functions is the teaching and supervision of all other personnel in nursing service.

The licensed practical nurses have been prepared to give direct bedside care to patients who need skilled but uncomplicated care and to assist doctors and registered professional nurses in giving service to those patients who need more complex care.

The nurses' aides are employed and trained to perform tasks which involve specified services for patients, as delegated by the registered professional nurses and performed under the direction of registered professional nurses or licensed practical nurses. They carry out tasks supportive and complementary to nursing practice. Although the performance of these tasks is essential to patient care, the nurses' aides are neither registered professional nurses nor licensed practical nurses, nor do their activities constitute the practice of nursing. Nurses' aides, therefore, assist registered professional nurses and licensed practical nurses by performing routine and non-professional tasks in caring for the personal needs and comforts of patients.

III. Criteria Essential for the Establishment of a Nurse's Aide Training Program:

- A. A demonstrated need for these workers.
- B. An understanding by the employer of the role of these workers and their limitations.
- C. Acceptable standards of patient care in the work situation.

- D. A qualified instructor.
- E. Cooperative planning of the course content to assure:
 - 1. Sufficient hours of classroom instruction and laboratory practice, followed by immediate and continuing supervision to assure safe practice.
 - 2. The instructor has freedom to supervise the trainees.
 - 3. The necessary classroom and equipment are available.
 - 4. The equipment is of the type which the trainee will be using in the actual work situation.
 - 5. Only approved activities are permitted in the work situation.
 - 6. The standards of achievement for retention in and completion of the course will safeguard the patient, the trainee, and the employer.
- F. Assurance that supervision by qualified personnel and in-service education will continue in the work situation.
- G. Sufficient qualified trainees are available (15-20 trainees per class).

IV. Purpose of the Training Program:

The purpose of the training program is to prepare a selected group of persons to perform tasks supportive to nursing practice which are both safe for the patient and practical for nursing service.

V. Trainee Qualifications:

The trainee should be screened carefully and should meet the following qualifications:

- 1. Demonstrated ability to enter at least the 9th grade. Additional education is preferred.
- 2. Ages of auxiliary workers vary widely. Existing laws and rules of State agencies, local employment opportunities, the ability of the individual to perform the expected tasks and to understand the nature of the supportive role in the care of the patient should be considered. No specific recommendation is made regarding age.
- 3. Provide written evidence of good physical, mental, and emotional health verified by a licensed physician.
- 4. Provide written evidence as to good moral character.
- 5. Have demonstrated an ability to read and write English, to understand own limitations, as well as those of the position and to work cooperatively with others.
- 6. Demonstrate an aptitude, manual dexterity and mental capacity for the position. (The Connecticut State Employment Service to administer Nurses Aide Test Battery).
- 7. Present cleanliness and propriety in dress and appearance.

VI. Instructor Qualifications:

The instructor needs to be selected with care and shall meet the following qualifications:

- A. Possess a knowledge of modern nursing practice and health facilities.

- B. Present above average grooming both in and out of uniform.
- C. Have the patience and understanding to deal with people of limited capacity.
- D. Have had recent successful nursing experience in an institution with an organized program for Nurses' Aides.
- E. Qualified as a teacher of nursing or have demonstrated teaching ability at the aide level.

VII. Course

Before any training program is initiated, the nursing instructor should have the course completely outlined in writing, clearly stating the objectives of the course, the content, and the plan for supervising procedures.

A. Time Allotment

- 1. The total hours of classroom teaching, lecture, demonstration and return demonstration and supervised practice on-the-job should total between 150-180 hours extending over a 5-6 week period of time.
- 2. It is suggested that the number of class hours, including return demonstration, be between 120-150 hours with provision being made for supervised work experience of at least 60 hours. The latter may need to be increased, dependent on the trainee.

B. Methods

It should include classroom instruction, demonstration, return demonstration and supervised work experience. The instructor shall determine the methods used and be responsible for all phases of the program. It is recommended that visual aids, pamphlets, etc. be used extensively.

C. Content

Content and lesson plans will be developed by the instructor in accordance with suggested skills and tasks as outlined:

- 1. The following subjects should be covered in all courses:
 - a. What makes a good nurses' aide?
 - b. How to: get along with people
 - c. make a bed
 - d. help with food service and feeding patients
 - e. move patients
 - f. care for mouth and teeth
 - g. give a back rub
 - h. help with a tub and shower bath
 - i. give a bed bath
 - j. give and remove a bed pan and urinal
 - k. help a patient dress and undress
 - l. care for the hands and feet
 - m. shampoo the hair
 - n. clean a patient's unit
 - o. take a temperature, pulse, and respirations
 - p. fill and apply a hot water bag, ice bag, etc.

2. Suggested Outline

- a. Introduction to course
 - 1. Objective of course
 - 2. Description of course
 - 3. Relationship of a nurse's aide to other members of the nursing team
 - 4. Principles of ethical conduct
 - 5. Legal implications
 - 6. Grooming
 - 7. Hand washing
 - 8. Making a paper bag
- b. Introduction to the patient
 - 1. Answering the patient's signal
 - 2. Arranging the patient's room and unit
 - 3. Making an empty bed
 - 4. Admission of a patient
 - 5. How to start a patient's record
- c. Temperature, Pulse, and Respiration
 - 1. How to: read a thermometer
 - 2. take an oral temperature
 - 3. take a rectal temperature
 - 4. count the pulse
 - 5. count respirations
 - 6. Charting T.P.R.
- d. Foods and Fluids
 - 1. Essentials of good nutrition
 - 2. How to: measure intake
 - 3. pass fresh water
 - 4. serve and remove a tray
- e. Foods and Fluids - continued
 - 1. How to feed a patient
 - 2. Serving extra Nourishment
 - 3. General Sanitation for food handlers
- f. Elimination
 - 1. How to: give and remove a bed pan
 - 2. give and remove a urinal
 - 3. collect a urine and stool specimen
 - 4. measure output
 - 5. give a simple cleansing enema
- g. Moving Patients
 - 1. Positioning and body mechanics
 - a. Back-lying
 - b. Side-lying
 - c. Face-lying
 - 2. How to assist a patient from bed to wheel chair
 - 3. How to: move a patient from bed to a stretcher
 - 4. help a patient walk
 - 5. assist a patient to a toilet
- h. Daily Patient Care and Personal Activities
 - 1. How to give morning care
 - a. Care of dentures and oral hygiene
 - b. Washing face and hands
 - c. Care of hair
 - 2. How to give or assist with a bed bath
 - 3. How to assist with a tub bath or shower
 - 4. Partial baths
 - 5. Assisting patient with self care

6. How to give a back rub
7. Hair shampoo (bed, shower, sitting up)
8. Shaving a patient
- i. Special Problems in Nursing Care
 1. How to care for the incontinent patient
 2. How to train the incontinent patient
 - Bladder and bowel routine
 3. How to prevent bed sores
 4. Care of the terminally ill patient
 5. Care of the diabetic patient
 - a. How to do the Clinitest and Acetone Test
 - b. Diabetic coma and insulin shock
 6. How to assist with pre-operative and post-operative care of patient
- j. Care of equipment and supplies
 1. How to keep the service (utility) room and kitchen in order
 2. General instructions on cleaning articles and equipment
 3. How to: care for linen - clean and soiled
 4. use the water sterilizer
 5. use clean pick-up forceps
 6. clean a patient's unit
- k. Giving Simple Treatments
 1. Application of heat and cold
 - a. How to: fill and apply a hot water bag
 - b. apply hot soaks
 - c. hot moist compresses
 - d. fill and apply an ice bag or collar
 - e. apply cold compresses
- l. Special Safety and Comfort Measures
 1. How to: use a bed cradle
 2. use a footrest or footboard
 3. use a foam rubber cushion
 4. Bed rails (side rails) - when and how used
 5. Care of appliances for safety and self-help such as dentures, eye glasses, walkers, crutches, canes, hearing aids, etc.
 6. Application of binders and ace bandages

VIII. Identification

- A. It is suggested that each trainee be required to wear the uniform designated by the employer when returning demonstrations or being engaged in work experience.
- B. It is recommended that the trainee be required to wear identifying insignia at all times when in uniform. A bar pin or an emblem designating status should be worn on the uniform, i.e., Nurse's Aide. It should be clearly visible to a person with whom the trainee is talking or to whom care is being given. Trainees should also be encouraged to wear identification after successful completion of the training program.

IX. Statement of Completion

- A. Marked discretion should be used in issuing any statement of completion to the trainee. There should be avoidance of the use of

words such as "instruction," or "laboratory practice," and "trained," "certified," or "graduate" in association with the words "nurse" or "nursing." Experience has proven that some individuals have a tendency to misrepresent their preparation and abilities.

B. It is suggested that if a statement of completion is issued, it be limited to:

1. Name of the training agency
2. Name of the individual
3. Program completed - Systematic training program for nurses' aides
4. Date of completion

X. Evaluation of Nurse's Aide Training Program

It is the definite opinion of the Connecticut Board of Examiners for Nursing, the Connecticut Health Department, the Connecticut Nurses' Association, and the Connecticut Department of Vocational Education that nursing is to be represented on local advisory committees for consultation with the local State Employment Service officials in developing and evaluating courses for nurses' aides.

The nursing agencies are specifically concerned with these points:

1. That there not be so many programs developed that the supply of aides trained exceeds the demand for their services, and
2. That the supply of aides trained not exceed the supply of available registered professional nurses to give the necessary supervision.

PREFACE

This curriculum guide has been prepared to assist Connecticut Licensed Practical Nurse instructors in developing more effective educational programs for the preparation of practical nurses. The guide attempts to define and delineate clearly the dual role of the practical nurse, show the depth and breadth of the educational program, and to center it on the patient as a person. Emphasis, however, should be placed on flexibility to meet the students' abilities, interests, and needs.

The philosophy in this guide reflects the belief that educational experiences should be built around the purpose of the learner and that the principles of learning must be adapted to the needs and abilities of the learner. Broad program objectives are stated and express those goals which are believed to be realistically attainable in the one year's educational program. Course content presented in this guide is the foundation for lesson plans which each instructor will need to develop.

A PHILOSOPHY OF PRACTICAL NURSE EDUCATION

We believe that:

1. Nursing, in its broadest sense, is an art and science which involves the entire patient - body, mind, and spirit. It provides direct personal service to individuals in relation to their basic human needs. The primary purposes of nursing are the preservation of life, the promotion and maintenance of high health standards, the alleviation of pain and suffering, and the prevention of disease.
2. Practical nursing is a recognizable component in the total pattern of patient care. In a well-planned educational program, the practical nurse can learn, within a specified period of time, the beginning skills, knowledge and understanding which are necessary "to nurse" effectively in limited situations of practice. She also can learn to assist the professional nurse and physician in caring for patients whose nursing needs require judgments, skills, and techniques which are beyond her preparation. The practical nurse's primary function, therefore, is to give effective patient care in so far as her preparation permits. It is the responsibility of the professional nurse to determine the degree of complexity within a nursing situation.
3. Proper emphasis should be placed on the dual role of the practical nurse: first, she is prepared to function independently at the bedside in situations free of complexity and secondly, she is qualified to act in more complex nursing situations as an assistant to doctors, professional nurses, and other medical and nursing personnel.

In vocational education we believe that nurse educators must have an insight into and provide experience for the individual's need for job satisfaction, job security, and status. All of these factors must be incorporated

into the educational program so that the student may develop new knowledge, skills and understanding, and ultimately, greater self direction.

4. Men and women who satisfy all admission requirements designated by the Connecticut State Department of Education and the Connecticut State Board of Examiners for Nursing, and who, through interviewing and testing, indicate an interest in and an aptitude for practical nursing, as well as a potential for vocational success and satisfaction should be considered for this program.
5. Both the teacher and the student must understand their respective roles in the learning process. The teacher provides the proper educational environment by planning for a logical sequence of meaningful educational experiences centered around clearly defined teacher - student objectives, which are designed to motivate and to test readiness and learning results.

We believe that in the framework of vocational education there will be found those facilities for administration, instruction, and supervision of the program which contribute to desirable learning outcomes.

6. The curriculum guide must have a single focus. It should be organized around the students' educational needs and provide abundant opportunities to apply the newly acquired skills and learning directly to situations of nursing practice. All concepts and facts which are drawn from the physical, biological, and social sciences should be selected because of their direct importance in the total process of learning to care for patients.
7. It is imperative that both practical and professional nurse educators strive continually to develop a clear concept of what constitutes nursing, and specifically, practical nursing. This will enable both groups to work together more effectively and be aware of the role each has and the contribution each offers to the unified purpose of nursing - that of providing more and better health care for the people in our nation.

OBJECTIVES OF PRACTICAL NURSE EDUCATION

In interpreting the objectives, it is necessary to realize that in a one-year program the student will be introduced primarily to selected learning experiences. Realistically, she cannot be expected to reach the zenith of her potentiality in the nursing position for which she has been prepared at the completion of the planned educational program. It is expected that she will continue to develop more skills, knowledge and understanding, so that she will become a more proficient member of the nursing team.

Curriculum Objectives:

1. To foster self-understanding which will enable the student to function more effectively as a person and a practical nurse.
2. To help the student develop a concise concept of her role as a

member of the health team so that she may recognize her responsibilities and limitations and also be able to interpret her dual role to others.

3. To aid the student in developing effective professional relationships with patients and the many members of the health team.
4. To encourage the student to exemplify good personal health and hygiene habits and to understand and appreciate the health needs of patients.
5. To help the student give safe and intelligent nursing care in limited nursing situations.

Comparison of functions and Competencies of LPN and AD Nurse
Statement Functions and Qualifications
of the Licensed Practical Nurse
(extracts)

Progressive Behavioral Competencies of the Associate Degree Nurse (developed by NESCHEN, The New England Council for Higher Education in Nursing)

The Statement of Functions and Qualifications of the Licensed Practical Nurse was prepared and approved by the Executive Board of the National Federation of Licensed Practical Nurses in June 1970. The National Federation of Licensed Practical Nurses is the membership organization for licensed practical/vocational nurses and is the recognized policy-making body for LPN/VNA.

Recognizes and has a commitment to meet the ethical, moral and legal obligations of the practice of practical nursing.

Maintains and promotes good health practices.

Actively promotes and participates in nursing organizations, inservice education programs, workshops, institutes and other educational and community activities.

The LPN is prepared to function as a member of the health-care team by exercising sound nursing judgment based on preparation, knowledge, skills, understandings and past experiences in nursing situations.

The LPN participates in the planning, implementation and evaluation of nursing care in all settings where nursing takes place. The following illustrate the types of activities performed:

Observes, records and reports to the appropriate persons.

(1) General and specific physical and mental conditions of patients, and signs and symptoms which may be indicative of change.

(2) Stresses in human relationships between patients, patients' families, visitors and health care personnel.

Provides for the emotional and physical comfort and safety of patients through:

The understanding of human relationships between and among patients, families and other health-care personnel.

Recognizing and understanding the effects of social and economic problems upon patients.

Protecting patients from behavior that would damage their self-esteem or relationship with families, other patients, or persons.

Recognizing and understanding cultural background, and spiritual needs, respecting and religious beliefs of individual patients.

Assisting the patient with activities of daily living and encouraging appropriate self-care.

Encouragement of patients to help themselves within their own capabilities.

Recognizing and encouraging the fullest use of the physical aptitudes and abilities of patients.

Ethics

Learning and Knowledge

Observation and Communication

Staff and Patient Interpersonal Relationships

First Year

Second Year

- * is aware of personal, ethical, and legal responsibilities in nursing.
- * respects patient's ideas and beliefs without imposing personal values upon patient.
- * begins to develop a philosophy regarding what constitutes good patient care.

- * maintains standard of behavior that reflects conviction of what constitutes safe, effective nursing care.

- * seeks information from appropriate sources with guidance from instructor.

- * seeks information on own initiative motivated by recognition of personal need.

- * correlates and transfers knowledge from other disciplines, especially the physical sciences to nursing practice, with guidance.

- * correlates and transfers knowledge from physical, behavioral, and social sciences to nursing practice, with minimum guidance.

- * utilizes information from materials she read through application to nursing practice.

- * knows and uses reliable sources of information in the health field.

- * knows that physical, emotional, and environmental conditions in everyday life influence health.

- * knows major manifestations of common physical and mental disorders at differing age levels.

- * understands normal growth and developmental changes and the needs of persons at various age levels.

- * interprets and evaluates vital signs; takes appropriate action.

- * measures, reports, and records accurately vital signs, including temperature (oral, rectal, axillary), pulse, respiration, blood pressure; fetal heart rate, apical-radial pulse.

- * assists with physical examination, prepares the patient and assists the physician during examination.
- * collects specimens as ordered.

- * charts statements accurately.

- * records relevant details on patient's progress.

- * reports accurately patients' conditions to instructor and/or immediate supervisor.

- * seeks out health team members on own initiative to discuss patient's problems.

- * follows physician's plan of treatment and translates it into nursing action.

- * differentiates emergency from non-emergency situation.
- * anticipates doctor's orders and requests.

- * interprets and translates physician's plan of treatment into nursing action.

- * recognizes the role of various para-medical personnel, knows lines of authority and communication, and uses them appropriately.

- * understands the lines of authority and communication and uses them appropriately.

- * shares information with peer group, instructor, team leader.

- * initiates cooperative action with peer group and other health personnel.

- * works cooperatively, under direction, with peer group and staff members.

- * identifies the more overt signs of emotional stress.

- * identifies the more covert signs of emotional stress.

- * endeavors to establish effective relationships with patients and families.

- * establishes effective relationships with patients and families.

- * attempts to talk and listen to patients with the focus on reality.

- * talks and listens with the focus on patient's problems.

- * initiates purposeful conversations with the focusing on needs.

- * offers understandable explanations based on scientific principles when questioned by patients about such matters as personal hygiene, nutrition, elimination.

- * recognizes situations in which health teaching is needed and desired.

- * assesses patient's level of knowledge and adapts teaching to this level.

- * relays information to qualified person if patient's need is beyond her scope of ability.

COMMONALITIES OF CURRICULUM REQUIREMENTS FOR THE LPN--RN NURSING PROGRAM

ACCORDING TO THE RULES AND REGULATIONS - CONNECTICUT STATE BOARD OF EXAMINERS
FOR NURSING

PRACTICAL NURSE EDUCATION

Section 20-90-27. Accreditation.

There is one form of organization for schools of practical nurse education, conducted by the Connecticut state department of education, division of vocational education. The administration and controlling body of the school of practical nursing shall demonstrate concern for the needs of the nursing education program and its continuing effectiveness.

Registered Nurses

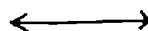
The program in the affiliating hospital shall include clinical courses in medical nursing, surgical nursing, obstetric nursing and nursing of children. Each course shall include related aspects of fundamentals of nursing, diet therapy, administration of common drugs, first aid, disaster nursing and additional pertinent concepts.



Clinical courses shall include medical nursing, surgical nursing, obstetric nursing, nursing of children and psychiatric nursing; Each area to include related aspects of pharmacology, diet therapy, rehabilitation, community health, disaster nursing, and additional pertinent concepts.

Clinical courses with related theory and experience shall meet the following requirements:

- Medical & Surgical Nursing and specialties within these services.....24 weeks
- Maternal & Child Nursing10 weeks



Clinical courses with related theory and experience shall meet the following requirements:

- Introduction to nursing ½ semester- 8 weeks
- Medical & surgical nursing 3 semesters- 48 weeks
- Maternal-child nursing 1 semester- 16 weeks
- Psychiatric nursing ½ semester-8 weeks

5 semesters 80 weeks

Section 20-90-38. Program. Minimum requirements.

- (a) The minimum length of the program shall be one year to include four months in the vocational-technical school and eight months in the affiliating hospital.
- (b) The program in the vocational-technical school shall include courses in the physical and biological sciences, to include body structure and function, elementary bacteriology and nutrition; orientation to practical nursing; interpersonal relations; legal aspects; and concepts of physical and mental health.



Section 20-90-26. Program. Minimum requirements.

- (a) (1) The minimum length of the program shall be equivalent to five academic semesters. Clinical experiences shall be concurrent with related academic subjects. The nursing core which correlates theory with practice shall be planned as a total unit through selective experiences leading to the development of knowledge, understanding, appreciation in interpersonal relations, and manual and communication skills. (2) Clinical experience shall be enriched by an adequate foundation in the social, physical and biological sciences essential to effective nursing practice. (3) Ratio of instructors to students shall be appropriate to the specific course and shall insure maximum educational benefit to students by making adequate teaching and educational supervision available at all times.

| OCCUPATION | INSTITUTING AGENCY | NATURE OF PROGRAM | ENTRANCE REQUIREMENTS | AFFILIATED AGENCIES | AVERAGE CLASS SIZE | TUITION AND FEES | STIPEND OR TRAINING WAGE | CREDENTIALS |
|------------|---|---|--------------------------------|---------------------|--------------------|--|--------------------------|-------------|
| | Bridgeport Hospital | 6-8 weeks of academic and on-the-job training. Most programs designed to include males (orderlies) and females (nurse aides). | H.S. Diploma | None | 10 | None Dormitory facilities not available | Contact hospital | Certificate |
| | Danbury Hospital | 4 weeks of academic and on-the-job training | None | None | 10 | None Dormitory facilities not available | \$1.85 per hour | Certificate |
| | HOSPITAL OF ST. RAPHAEL - please see ST. RAPHAEL HOSPITAL | | | | | | | |
| | Laurel Heights Hospital | 12 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma | None | 2-30 | None Dormitory facilities not available | Contact hospital | Certificate |
| | Meriden-Wallingford Hospital | 6 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma | None | 5-8 | None Dormitory facilities not available | \$1.00 per month | Certificate |
| | Middlesex Memorial Hospital | In-service training to prepare individuals in skills required to function as a nursing aide. Training begins at various times of the year | H.S. Diploma | None | 10 | None Dormitory facilities not available | \$588.80 per month | Certificate |
| | New Britain General Hospital | 4 weeks on-the-job training. Training begins at various times of the year | H.S. Diploma (with exceptions) | None | 10 | None Dormitory facilities not available | None | Certificate |
| | Norwalk Hospital | 4-6 weeks of academic and on-the-job training. Training begins at various times of the year | H.S. Diploma (with exceptions) | None | 10 | None Dormitory facilities not available | Approx. \$2.50 per hour | Certificate |
| | Park City Hospital | 8 weeks of academic and on-the-job training. Training begins at various times of the year | None | None | 10 | None Dormitory facilities not available | \$380 per month | Certificate |
| | St. Joseph Hospital | On-the-job training. Training begins at various times of the year | H.S. Diploma | None | 8 | None Dormitory facilities not available | \$406.25 per month | Certificate |
| | St. Mary's Hospital | 8 weeks of academic and clinical training. Training begins at various times of the year | H.S. Diploma (with exceptions) | None | 5-8 | None Dormitory facilities not available | Contact hospital | None |

Comparison of curriculum content of LPN program with one AD-RN program, Cont'd.

LPN

AD-RN

Pediatric nursing period of infancy
 See complications of pregnancy
 Pediatric nursing - Mentally-
 Deficient Child
 Complications of pregnancy
 Nutritional needs of the new baby
 Obstetrical nursing
 Obstetrical nursing - the new baby
 Pediatric nursing - pre-school child

Pediatric nursing - school-age child

Pediatric nursing - Adolescent

Pre-Nursing - the well child
 Member of family
 Basic needs
 Growth and development of child
 (includes diseases)

Intro. to medical/surgical nursing
 Surgical patient
 Introduction
 Pre-operative preparation
 Anesthesia

Post operative care

Assisting with intravenous therapy
 General nursing care of post-operative
 patient
 Assisting with care of suctioning
 apparatus
 Oxygen therapy

Staphylococcal infections

Antibiotics

Nursing of toddlers
 Prenatal complications
 Mental retardation

Prenatal complications
 Normal nutrition relation to family
 Complications of labor and delivery
 Post-partum complications
 Nursing pre-schoolers

Grief in O.B.
 Nursing school-age children

Death/grief in children
 Infertility and fertility

Problems of adolescent

Marriage
 Problems in child rearing
 Nutrition-pre/post partum

Surgical Nursing
 Overview-theory

Pre-operative phase
 Operative phase
 Pre-operative instruction (student presentation)
 Post operative phase
 Surgical nursing continued
 Intravenous therapy (student presentation)

Healing phase
 Suctioning (student presentation)

Oxygen therapy (student presentation)
 Patients with infections
 Effects of isolation
 Patients with infections: infancy to school age
 Isolation techniques (student presentation)
 Patients with infections: school age to teenage
 Dressings (student presentation)
 Patients with infections: adult/geriatric,
 growth/development of middle and later years

Antibiotic therapy
 Fever

Comparison of curriculum content of LPN program (as contained in the course outlines provided by the Connecticut State Department of Education, Vocational Division) with one AD-RN program presented in a Connecticut Community College

LPN

Intro. to Practical Nursing
 Interpersonal Relations

Basic Fundamentals of Nursing
 Patient Environment
 Admission
 Transferring patient
 Personal hygiene of patient
 Therapeutic Procedures:
 Surgical and Medical Asepsis
 Diagnostic procedures
 Body Structure and Function
 The Urinary System
 The Digestive System

Common Drugs and Administration

Nutrition/Diet Therapy
 Therapeutic Procedures

Care of the dying
 Care of the deceased

Introduction to obstetrical nursing

Introduction to Pediatric Nursing

Family-centered approach
 Anatomy/physiology of reproduction/
 conception
 Expectant mother
 (includes complications of pregnancy)
 Prenatal care
 Psychological aspects of pregnancy
 The new baby

AD-RN

Intro. to Nursing
 Orientation for nursing, man/health
 Interpersonal Relations, Communications

Beginning needs of hospitalized

Personal hygiene, activity, exercise, comfort
 Asepsis

Health evaluation/observation
 Elimination: Urinary System
 Gastrointestinal System
 Fundamentals of Nursing Care
 Planning
 Pharmacology
 Pain
 Nutritional needs
 Fundamentals of Nursing Intervention:
 Introduction
 Nursing Role:
 Support while getting well
 In grief and dying
 Maintaining
 Adequate respiration
 Fluid and electrolyte balance
 Maternal/Child Nursing (includes clinical)

Orientation to pediatric nursing (film)
 Orientation to maternal nursing (film)

The family
 Prenatal care, menstruation,
 fertilization

Labor and delivery
 Prenatal psychology
 Normal newborn
 Post-partum relationship
 Film on exercises for labor and delivery
 Complications of newborn
 Prematurity
 Further complications of newborn

Comparison of curriculum content of LPN program with one AD-RN program, Cont'd.

LPN

AD-RN

The Surgical Patient (continued)

Post operative discomforts

Post operative complications

Preventive measures

Medical and surgical nursing,

Didactic

Clinical

Patient with diseases/conditions
of the cardiovascular system (clinical)

Patient with cardiac/circulatory
conditions (didactic)

Patient with diseases of blood
vessels (clinical)

Patient with disease of the blood

Patient with diseases/conditions of
respiratory system (clinical)

Intro. to medical surgical nursing-
mental health unit

Introduction

Persons/agencies to whom mentally
ill person can turn for help

Mentally ill patient-creating
therapeutic environment

Causes of mental illness

Mental diseases

Creating therapeutic environment
in psychiatric nursing

Basic approaches to psychiatric
behavior patterns

Security measures

Special therapies in psychiatric
hospitals

Medical-Surgical Nursing

Didactic and Clinical

Patient with Diabetes Mellitus
(Didactic)

Patient with diseases/conditions of
nervous system (clinical)

Physical/Mental Illness
(Physical component)

Nursing care of infants with congenital heart
defects

Mental and physical health

Crisis of illness

Children with respiratory and cardiac disorders

Rheumatic Heart Disease

Adults with circulatory disorders
congestive heart disease

Coronary heart disease

Peripheral vascular disease

Arteriosclerosis, etc.

Cerebral vascular accident

Blood Dyscrasias

Cardiotonic drugs, vasodilators, bronchodilators

Patients with respiratory disorders

Lung surgery

Psychiatric Nursing

Review of objectives

Crisis of illness

Nurse-patient relationship

Communication-initiating the relationship

Behavior has meaning-anxiety and behavior

Etiology of mental illness

Schizophrenia

Aggression-Depression

Controlling anxiety physically

Controlling anxiety with ritualistic behavior

Socially aggressive patterns of behavior

Alcoholism/drug addiction

Organic factors leading to disturbed behavior

Suicide/crisis intervention

Treatment modalities/nurses' role

Somatic treatments-patients' rights and legalities

Patients with metabolic or nutritional impairment

Patient with locomotive or neurological
impairment

Comparison of curriculum content of LPN program with one AD-RN program, Cont'd.

LPN

Patient with diseases of urinary
and/or gastrointestinal
Patient with kidney conditions

Emergency nursing

Patient with carcinoma
Cancer also discussed in most
sections of clinical

Patient with diseases/conditions of
eye and ear (clinical)
Patient with skin disorders (didactic)

AD-RN

Patient with elimination impairment

Patient involved in accidents
Disaster Nursing

Patient with neoplasms

Patients with sensory impairment.
(includes skin disorders)

Comprehensive nursing

To help student identify/solve problems,
anticipate problems which may arise
when dealing with groups of patients

**GOALS AND BEHAVIORAL OBJECTIVES CENTRAL ARIZONA COLLEGE
(ARTICULATED PROGRAM--COMMUNITY COLLEGE LEVEL)**

GOALS: The student completing the first level will be able to (when confronted with a normal patient or one experiencing a common pathophysiologic problem in relation to psycho-social adjustment, comfort and safety, activity and exercise, intake and utilization of nutrients, elimination, rest and sleep, and oxygen):

LEVEL I

1. Perform simple nursing procedures with safety and skill.
2. Recognize normal body structure, normal growth and development, and utilize principles of physical and mental health in order to recognize deviations.
3. Report deviations from normal and record procedures and observations.
4. Communicate with patients and other members of the nursing team in uncomplicated situations.
5. Use a nursing care plan in care of patient and contribute to modifications.
6. Understand legal and ethical framework of nursing.
7. Demonstrate sufficient knowledge and skills to function as a nursing assistant.

This course is offered with the laboratory and classroom on campus. The clinical experience will be in the working area of one or more of the affiliating agencies. The classroom teaching will utilize team teaching. Laboratory and library facilities are available.

LS: The student having attained the objectives of Level I, completing the second level will be able to (when confronted with normal or patient experiencing a common pathophysiologic problem in relation to psycho-social adjustment, comfort and safety, activity and exercise, intake and utilization of nutrients, elimination, rest and sleep, and oxygen):

LEVEL II

1. Function at the beginning level of drug administration.
2. Give total patient care in simple nursing situations.
3. Assist the professional nurse with total patient care in complex situations.
4. Utilize limited assessment abilities to help prepare and modify nursing care plans.
5. Transcribe and initiate physician's orders under supervision.
6. Utilize knowledge of common illnesses and usual modes of treatment.
7. Maintain own health and be able to advise others in regard to nutrition, cleanliness and comfort measures.
8. Understand the roles of other health agencies and methods of referral.
9. Understand the role and scope of the functions of the practical nurse including ethical and legal responsibilities and administrative lines of communication.
10. Integrate beliefs and attitudes into a philosophy of nursing which includes:
 - a) realization that learning is continuous and never-ending
 - b) being able to adjust to changes in the work situation
 - c) being able to reinforce the patient's confidence in prescribed therapeutic regime
 - d) realization that the health worker is a role model

The student at this level may make application to take the State Board of Nursing examination for practical nursing.

GOALS: The student, having attained the objectives of Level I and II, completing the third level will be able to (when confronted with normal or patient experiencing a common pathophysiologic problem in relation to psychosocial adjustment, comfort and safety, activity and exercise, intake and utilization of nutrients, elimination, rest and sleep, and oxygen):

LEVEL III

1. Give total patient care in more complex situations utilizing knowledge and principles from natural and social sciences.
2. Evaluate and determine priorities in nursing care, recognize significant changes, initiate nursing and medical action and evaluate effectiveness of selected action.
3. Assess patient needs, prepare and modify nursing care plans based on evaluation of effectiveness of nursing actions.
4. Supervise the work of other team members in the initiation and use of nursing care plans in the technical aspects of care.
5. Utilize knowledge and skills to teach patients and families techniques of care.
6. Utilize knowledge concerning the community resources for emotionally disturbed, recognize significant deviations from normal, understand current modalities of treatment and assist in providing therapeutic environment.
7. Utilize knowledge of manifestations of common diseases and abnormal conditions and usual treatment.
8. Understand the actions of drugs on the body systems.
9. Internalize the concept of the patient as an individual with needs which can be met through personalized nursing care; those needs are in a constant state of change.
10. Make application to take the state board examination for registered nurse.

PHILOSOPHY OF ARTICULATED NURSING PROGRAM

CENTRAL ARIZONA COLLEGE, COOLIDGE ARIZONA

DEPARTMENT OF NURSING

PHILOSOPHY AND OBJECTIVES

We believe:

That nursing is a service based on social and biological science; that it involves the prevention of illness and disability, and care of the sick; and that the functions of nursing include the assisting of the individual with knowledge, motivation or function until he no longer needs these services; the maintenance of a therapeutic environment, and the carrying out of medical orders.

Since meeting the needs in the community is compatible with our philosophy, we feel that students should be admitted to the program knowing there are levels at which they can leave for employment with salable skills. That no educational program is terminal and that the accomplishment of short-term goals results in increased potential for the realization of other more difficult goals.

The philosophy of this college embraces the philosophy of this department:

"because every individual in the United States must think as ably and as clearly as possible to enhance the well-being of our democratic way of life in the time of its gravest challenge; because every individual in the United States must have the finest education to satisfy his social wishes and assume his full responsibility as a citizen in his country; because every individual in our nation must have the very best education in order to satisfy his economic wants through his ability to assume responsibility in the highly complex and technical age in which we live; and because the community college is superbly conceived to provide expanding opportunities in education for our growing and demanding population - we of Central Arizona College are proud to dedicate our efforts to the realization of these goals."

We accept the nurse assistant as a valuable supportive member of the medical and nursing staff. The minimum preparation for functioning in nursing should be at Level I (Nursing Assistant).

That a practical nurse can be developed utilizing the knowledges, attitudes and skills of Level I. In the preparation of this worker we accept and are dedicated to the Role Description as set forth in "Statement of Functions of the Licensed Practical Nurse", American Nurses' Association, Inc., 1964:

"The work of the LPN is an integral part of nursing. The licensed practical nurse gives nursing care under the supervision of the registered professional nurse or physician to patients in simple nursing situations. In more complex situations the licensed practical nurse functions as an assistant to the registered professional nurse."

That technical nursing proficiencies can be developed utilizing the practical nursing base. This is the technical nurse as defined by the Council of Associate Degree Programs of the National League for Nursing at the meeting of May 5, 1967:

"A registered nurse with an associate degree in nursing licensed for the practice of nursing who carries out nursing and other therapeutic measures with a high degree of skill, using principles from an ever-expanding body of science. The technical nurse performs nursing functions with patients who are under the supervision of a physician and/or professional nurse and assists in planning the day-to-day care of patients, evaluating the patient's physical and emotional reactions to therapy, taking measures to alleviate distress, using treatment modalities with knowledge and precision, and supervising other workers in the technical aspects of care."

This program will allow admission of students to the nursing program without extensive screening. That the student, who for academic or personal reasons must interrupt her education, will have salable skills at three levels. That entering students should be admitted to nursing to determine if they have the ability or interest to continue in this service.

That the instructors in the nursing programs have faith in the abilities of students and in their interest in learning. Rosenthal and Jacobsen in "Teacher Expectations for the Disadvantaged",

Scientific American 218 (4): 19-23, April, 1968) state that the expectations of the teacher have a significant influence on the accomplishment of students.

Composite Description

Listing of tasks in the order of greatest-to-least frequency from the Connecticut health facilities job descriptions, using UCLA TASK LIST.

- 46 Assist patients with personal care (i.e. oral hygiene, bathing backrubs, combing hair, shampoos, shaves, toe and fingernail care)
- 44 Maintain, store, clean, sterilize equipment or supplies, clean patient units
- 40 Assist staff in patient care activities
- 39 Take and record temperature (oral, rectal, axillary)
- 37 Collect and care for specimens (urine, stool, sputum), including proper delivery
- 36 Take and record radial pulse, respiration
- 34 Make patients' beds (occupied, unoccupied, anesthetic bed)
- 34 Give enemas
- 31 Prepare, give between meal nourishments (i.e. solid foods, liquids, fruit, etc.)
- 31 Observe, measure, record output
- 30 Assist patient in using bedpan, urinal, bedside commode, or going to the bathroom
- 30 Observe, measure, record food and fluid intake
- 27 Assist with and/or apply bandages, elastic stockings, non-sterile dressing, T dressing; straight, breast, scultetus, triangular sling binders; roller bandages, rib belts
- 27 Feed patients (adults, infants, children)
- 27 Assist patient to get in and out of bed, transfer from bed to chair
- 26 Dispose of contaminated materials, linen, equipment
- 25 Collect and serve food on trays
- 24 Test urine for sugar, acetone
- 23 Provide and/or assists with post mortem care
- 22 Observe, report and/or record objective signs and symptoms of illness, disorder, body malfunction, skin rashes, swelling, bleeding), patient's general physical and emotional condition
- 22 Assist patient in walking, dangling
- 22 Assist patient with dressing, undressing
- 22 Administer sits bath, alcohol bath, medicated bath
- 21 Talk with, obtain and give information to patients, family, staff (attend unit report)
- 20 Adjust side rails, height of bed, apply restraints
- 19 Record height and weight
- 18 Turn patient, place patient in correct body alignment
- 17 Handles patient property and assumes appropriate legal responsibility
- 17 Prepares, and/or assists in preparation of trays, instruments equipment
- 16 Take and record blood pressure
- 16 Apply ice bags, hot water bottle
- 16 Record tests, treatments, procedures
- 15 Provides special skin care (i.e. for decubitus ulcers, patients in restraints, casts, comatose and semi-comatose patients)
- 14 Apply and/or remove gown, mask; wash hands, and/or scrub
- 14 Attend nursing care conferences
- 14 Connect catheters and tubing to drain; insert urinary catheter; irrigate bladder
- 13 Check working order of equipment
- 12 Set up and/or maintain traction

NA Composite Description (cont.)

- 12 Use mechanical devices (i.e. Hoyer lift) to move patients
- 10 Apply hot and cold packs, compresses, soaks
- 8 Uses comfort devices (i.e. footboards, air rings, doughnuts, trochanter rolls, sandbags, alternate pressure mattresses, overbed cradles
- 7 Record nursing care, accidents, unusual incidents; report same
- 6 Empty drainage bottles, bags, maintain drainage tubing without suction (i.e. urinary catheters, T-tubes)
- 5 Observe, report and/or record positive or negative general behavior, physical appearance, or emotional responses to treatments, medication, nursing care (e.g. decreased bleeding, interaction with family, staff; eating habits, increased or decreased communication, etc.)
- 5 Assist patients in preparation for surgery, treatments, diagnosis studies
- 4 Operate Stryker, Foster frames and circle beds
- 4 Supervise patient participation in activities, e.g. dances, games, etc.
- 3 Assist patient in range of motions; active and passive exercises
- 3 Apply heating pads, hypothermia
- 3 Read, obtain information from charts
- 3 Assist patients in preparation to crutch walking
- 2 Assist physician with rounds to patients
- 2 Assist with individual and group therapy
- 2 Prepare and assist patient to see clergy, receive sacraments, assist in religious rites
- 2 Assist and/or apply sterile dressings and bandages
- 2 Position, screen drape patient for rectal, vaginal, proctoscopic and other surgical and obstetrical procedures; assist physician with procedures
- 1 Check working order of equipment, inventory emergency supplies, drugs
- 1 Apply and/or remove braces
- 1 Assists in the preparation of patient care plan, identification of problems and needs; suggest changes when indicated
- 1 Read skin tests
- 1 Apply medicated compresses, packs, soaks
- 1 Regulate and discontinue intravenous fluids and blood transfusions
- 1 Irrigate wound, colostomy, stomach, eye, ear, throat, bladder, vagina
- 1 Assist with and/or take EKG's
- 1 Draw blood samples
- 1 Handle sterile equipment, sterile packs, pour sterile solutions
- 1 Do sterile scrub, apply sterile gown, gloves
- 1 Assist and/or participate in occupational activities with patients
- 1 Assist with and/or apply splints
- 1 Assist patients following amputations
- 1 Remove fecal impactions
- 1 Administer and regulate oxygen mask, oxygen catheter; administer oxygen by means of positive pressure; administer oxygen tent: set up and regulate croupette

Licensed Practical Nurse (LPN)

Composite Description

Listing of tasks in the order of greatest-to-least frequency from the Connecticut health facilities job descriptions, using UCLA TASK LIST.

- eq. 34 Assist staff in patient care activities
- 33 Record nursing care, accidents, unusual incidents; report same
- 27 record tests, treatments, procedures
- 27 Assist in the preparation of patient care plan, identification of problems and needs; suggest changes when indicated
- 27 Observe, report and/or record positive or negative general behavior, physical appearance, or emotional responses to treatments, medication, nursing care (e.g. decreased bleeding, interaction with family, staff; eating habits, increased or decreased communication, etc.)
- 26 Observe, report and/or record objective signs and symptoms of illness, disorder, body malfunction, skin rashes, swelling, bleeding), patient's general physical and emotional condition.
- 26 Take and record temperature (oral, rectal, axillary)
- 26 Take and record radial pulse, respiration
- 25 Prepare and administer oral, intramuscular, rectal, inhalation medication
- 23 Assist physician with rounds to patients
- 23 Take and record blood pressure
- 22 Assign patients to team members; assign unit tasks to team members; supervise, evaluate and/or assist in evaluation of performance of staff members
- 22 Talk with, obtain and give information to patients, family, staff (attend unit report)
- 22 Attend nursing care conferences
- 21 Assist patients with personal care (i.e. oral hygiene, bathing, backrubs, comb hair, shampoos, shaves, toe and fingernail care)
- 21 Feed patients (adults, infants, children)
- 19 Position, screen drape patient for rectal, vaginal, proctoscopic and other surgical and obstetrical procedures; assist physician with procedures
- 16 Assist with and/or apply bandages, elastic stockings, non-sterile dressing, T dressing; straight, breast, scultetus, triangular sling binders; roller bandages, rib belts
- 15 Prepare, and/or assist in preparation of trays, instruments, equipment
- 14 Maintain, store, clean, sterilize equipment or supplies, clean patient units
- 12 Assist and/or apply sterile dressings and bandages
- 11 Assist patient in using bedpan, urinal, bedside commode, or going to the bathroom
- 10 Observe, measure, record output
- 10 Handle patient's property and assume appropriate legal responsibility
- 10 Provide and/or assist with post mortem care
- 10 Irrigate wound, colectomy, stomach, eye, ear, throat, bladder, vagina
- 9 Collect and care for specimens (urine, stool, sputum), including proper delivery
- 9 Give enemas
- 9 Record height, weight
- 9 Connect catheters and tubing to drain; insert urinary catheter; irrigate bladder
- 8 Teach patients, family, staff general hygiene in relation to prevention of illness and promotion of health, rehabilitation activities of daily living

LPN - Composite Description, Cont'd.

- 7 Check for shock, hemorrhage, and/or other post-operative complications.
Take required preventive measures.
- 7 Provide special skin care (i.e. for decubitus ulcers, patients in restraints, casts, comatose and semi-comatose patients)
- 7 Apply ice bags, hot water bottle
- 7 Check working order of equipment, inventory emergency supplies, drugs
- 6 Apply hot and cold packs, compresses, soaks
- 6 Apply medicated compresses, packs, soaks
- 5 Administer and regulate oxygen mask, oxygen catheter; administer oxygen by means of positive pressure; administer oxygen tent; set up and regulate croupetts
- 5 Assist patients in preparation for surgery, treatments, diagnosis studies
- 5 Test urine for sugar, acetone
- 5 Initiate service or referral for patients
- 5 Coordinate patient care activities with other departments, e.g. physical therapy
- 5 Suction patient's throat and nose passage; suction tracheotomy; remove and clean inner cannula of tracheotomy
- 5 Take inventory of drugs
- 5 Regulate and discontinue intravenous fluids and blood transfusions
- 5 Prepare food so patient may assist self
- 4 Give vaginal (douche)
- 4 Prepare, give between meal nourishments (i.e. solid foods, liquids, fruit, etc.)
- 4 Collect and serve food on trays
- 4 Conduct nursing care conferences
- 4 Take and record physician's verbal orders
- 3 Identify, interpret patient's needs, problems, signs, behavior symptoms related to physical, emotional, spiritual needs; identify approaches and/or solutions concerning problems and needs
- 3 Teach patient, family, staff in relation to objectives of nursing care of current illness, convalescence, as well as the physician's plan of care including preventive measures, maintenance and promotion of health (i.e. nutrition, oral hygiene, vaccinations, pre-natal and newborn care, etc.)
- 3 Analyze nursing care requirements and report staffing needs
- 3 Prepare patient care plan, identify problems and needs; suggest changes when indicated
- 3 Supervise patient participation in activities, e.g. dances, games, etc.
- 3 Assist with and/or take EKGs
- 3 Read, obtain information from charts
- 3 Observe, measure, record food and fluid intake
- 3 Count pulse: apical
- 3 Administer sitz bath, alcohol bath, medicated bath
- 3 Transcribe physician's orders
- 3 Give artificial respiration
- 2 Apply and/or remove gown, mask; wash hands, and/or scrub
- 2 Administer gastrostomy
- 2 Assist patient in walking, dangling
- 2 Adjust side rails, height of bed, apply restraints
- 2 Dispose of contaminated materials, linen, equipment
- 2 Set up and/or maintain traction
- 1 Use mechanical devices (i.e. Hoyer lift) to move patients
- 1 Count fetal heart tones

Registered Nurse (RN)

Composite Description

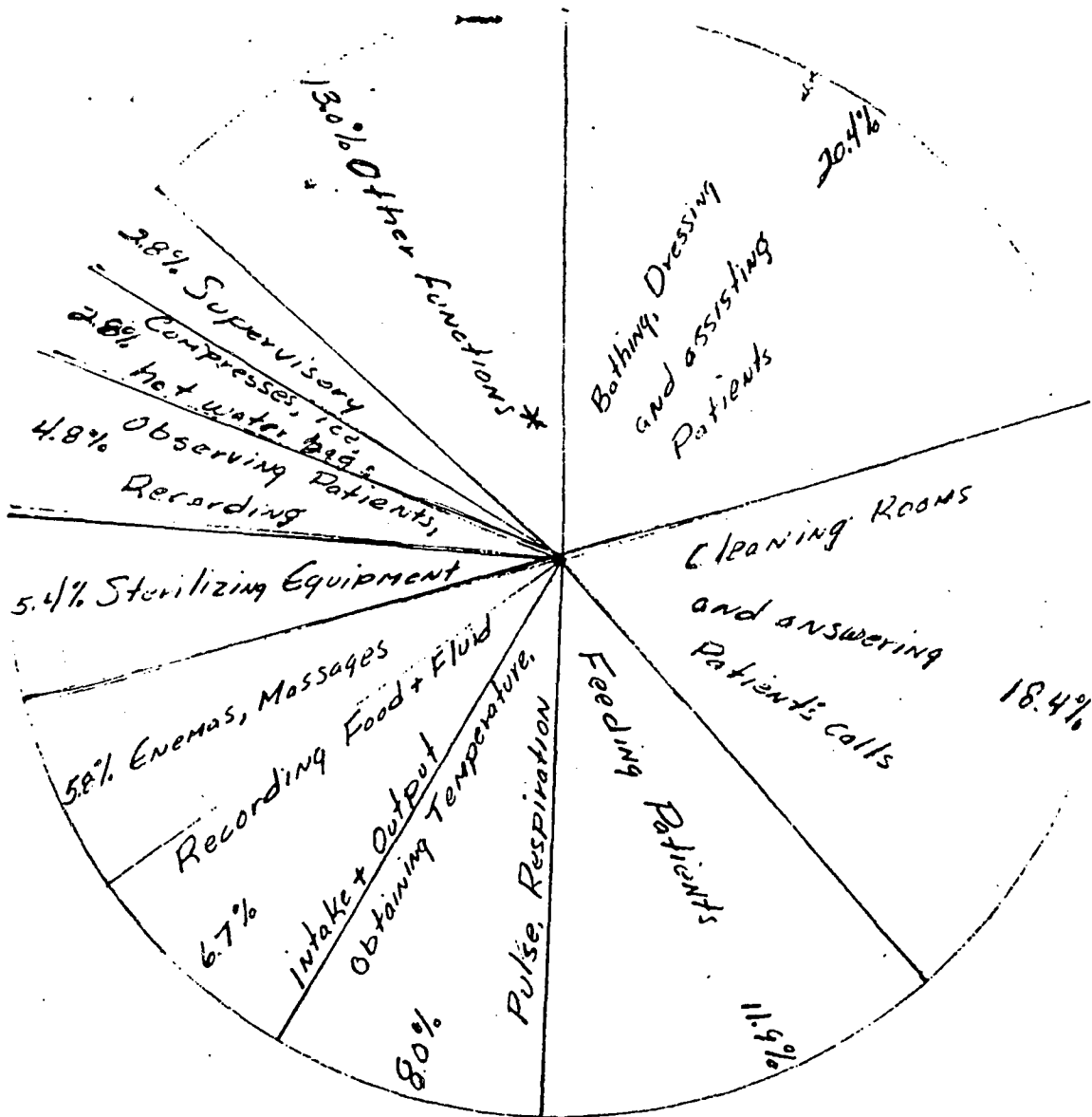
Listing of tasks in the order of greatest-to-least frequency from the Connecticut health facilities job descriptions, using UCLA TASK LIST.

- 44 Assign patients to team members; assign unit tasks to team members; supervise, evaluate and/or assist in evaluation of performance of staff members
- 38 Record nursing care, accidents, unusual incidents; report same
- 33 Observe, report and/or record positive or negative general behavior, physical appearance, or emotional responses to treatments, medication, nursing care (e.g. decreased bleeding, interaction with family, staff; eating habits, increased or decreased communication, etc.)
- 31 Record tests, treatments, procedures
- 31 Prepare and administer oral, intramuscular, rectal, inhalation medication
- 30 Attend nursing care conferences
- 28 Talk with, obtain and give information to patients, family, staff (attend unit report)
- 27 Observe, report and/or record objective signs and symptoms of illness, disorder, body malfunction, skin rashes, swelling, bleeding), patient's general physical and emotional condition.
- 26 Assist physician with rounds to patients
- 25 Identify, interpret patients' needs, problems, signs, behavior symptoms related to physical, emotional, spiritual needs; identify approaches and/or solutions concerning problems and needs
- 25 Assist staff in patient care activities
- 25 Take and record radial pulse, respiration
- 29 Teach patients, family, staff general hygiene in relation to prevention of illness and promotion of health, rehabilitation activities of daily living
- 24 Position, screen drape patient for rectal, vaginal, proctoscopic and other surgical and obstetrical procedures; assist physician with procedure
- 22 Teach patients, family, staff in relation to objectives of nursing care of current illness, convalescence, as well as the physician's plan of care including preventive measures, maintenance and promotion of health (i.e. nutrition, oral hygiene, vaccinations, pre-natal and newborn care, etc.)
- 21 Feed patients (adults, infants, children)
- 21 Assist patients with personal care (i.e. oral hygiene, bathing, backrubs, comb hair, shampoos, shaves, toe and fingernail care)
- 19 Conduct nursing care conferences
- 16 Prepare, and/or assist in preparation of trays, instruments, equipment
- 15 Take and record temperature (oral, rectal, axillary)
- 14 Coordinate patient care activities with other departments, e.g. physical therapy
- 13 Initiate service or referral for patients
- 13 Check working order of equipment, inventory emergency supplies, drugs
- 12 Assist with and/or apply bandages, elastic stockings, non-sterile dressing, T dressing; straight, breast, scultetus, triangular sling binders; roller bandages, rib belts
- 10 Take and record blood pressure
- 10 Check for shock, hemorrhage, and/or other post-operative complications. Take required preventive measures

Composite Description Cont'd.

- 10 Assist and/or apply sterile dressings and bandages
- 9 Read, obtain information from charts
- 9 Assist patients in preparation for surgery, treatments, diagnostic studies
- 8 Give artificial respiration
- 8 Take inventory of drugs
- 7 Maintain, store, clean, sterilize equipment or supplies
- 7 Provide special skin care (i.e. for decubitus ulcers, patients in restraints, casts, comatose and semi-comatose patients)
- 7 Analyze nursing care requirements and report staffing needs
- 5 Give intravenous medications
- 5 Prepare food so patient may assist self
- 5 Give cardiac resuscitation (mouth-to-mouth), closed chest massage
- 5 Connect catheters and tubing to drain; insert urinary catheter; irrigate bladder
- 4 Prepare, give between-meal nourishments (i.e. solid foods, liquids, fruit, etc.)
- 4 Count pulse, apical
- 4 Transcribe physician's orders
- 4 Assist with individual and group therapy
- 4 Assist in the preparation of patient care plan, identification of problems and needs; suggest changes when indicated
- 4 Collect and serve food on trays
- 3 Observe, measure, record output
- 3 Record height, weight
- 3 Observe, measure, record food and fluid intake
- 2 Dispose of contaminated materials, linen, equipment
- 2 Supervise patient participation in activities, e.g. dances, games, etc.
- 2 Adjust side rails, height of bed, apply restraints
- 2 Start and regulate intravenous fluids, blood transfusions
- 2 Handle patient property and assume appropriate legal responsibility
- 2 Set up and/or maintain traction
- 2 Apply and/or remove gown, mask; wash hands, and/or scrub
- 2 Assist patient in using bedpan, urinal, bedside commode, or going to the bathroom
- 2 Assist with and/or take EKGs
- 2 Give enemas
- 2 Take and record physicians' verbal orders
- 2 Assist patient in walking, dangling
- 2 Irrigate wound, colostomy, stomach, eye, ear, throat, bladder, vagina
- 1 Administer and regulate oxygen mask, oxygen catheter; Administer oxygen by means of positive pressure; administer oxygen tent; set up and regulate croupetts
- 1 Turn patient, place patient in correct body alignment
- 1 Assist patient to get in and out of bed, transfer from bed to chair
- 1 Transport patient in wheelchair, stretcher
- 1 Use mechanical devices (i.e. Hoyer lift) to move patients
- 1 Test urine for sugar, acetone
- 1 Regulate and discontinue intravenous fluids and blood transfusions
- 1 Collect and care for specimens (urine, stool, sputum), including proper delivery
- 1 Empty drainage bottles, bags, maintain drainage tubing without suction (i.e. urinary catheters, T-tubes)
- 1 Make patients' beds (occupied, unoccupied, anesthetic bed)
- 1 Assist patient with dressing, undressing
- 1 Apply ice bags, hot water bottle
- 1 Assist and/or participate in occupational activities with patients
- 1 Assist patients following amputations Apply medicated compresses, packs, soaks
- 1 Apply hot and cold packs, compresses, soaks Check working order of equipment
- 1 Record physician's orders
- 1 Suction patient's throat and nose passage; suction tracheotomy; remove and clean inner cannula of tracheotomy.

Functions by Nurses' Aides

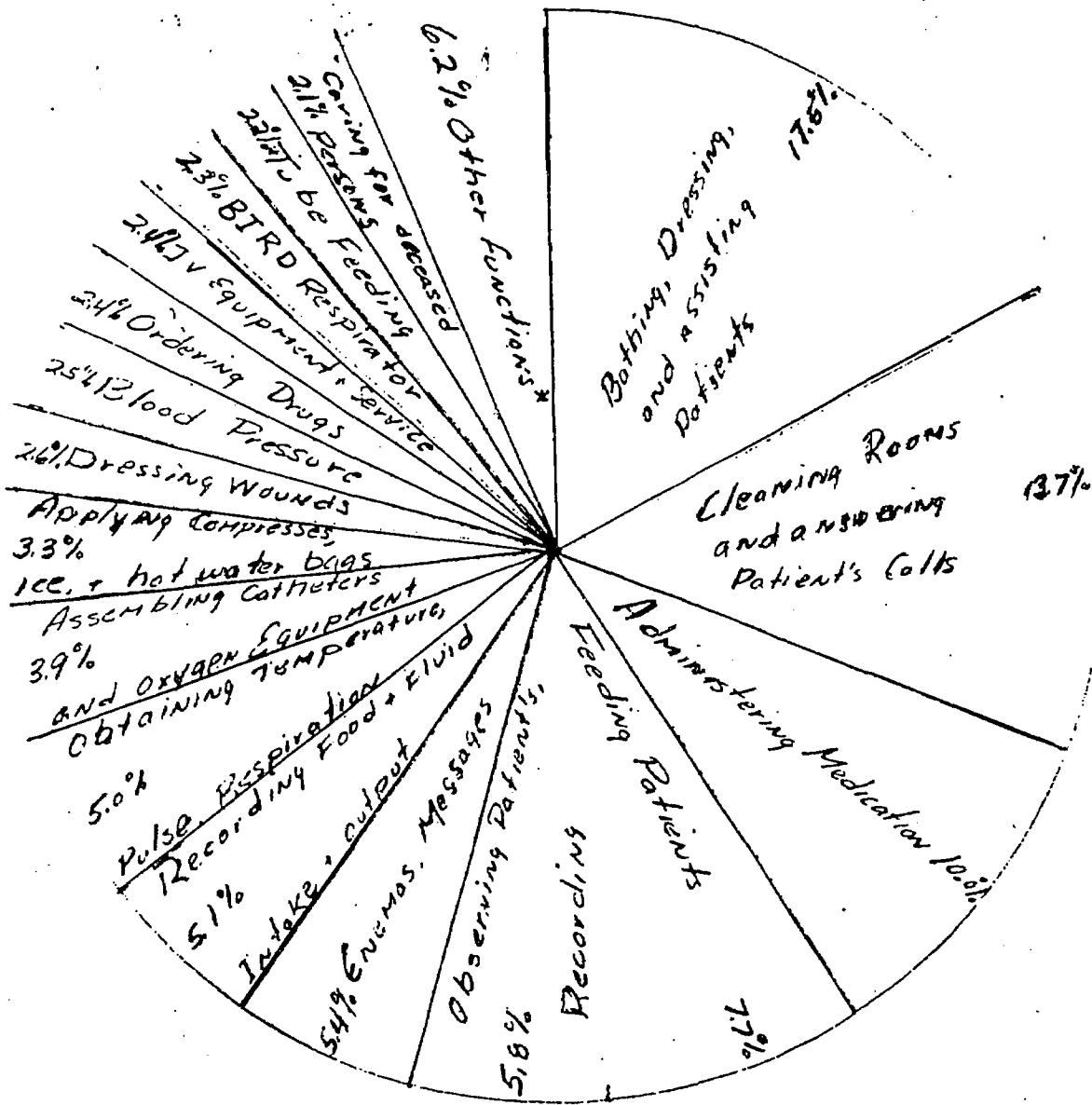


* Other Functions:

- | | |
|--------------------------------------|---|
| a. Tube Feeding | g. Setting up and Using BIRD Respirator |
| b. Ordering Drugs for Patients | h. Teaching |
| c. Taking & Recording Blood Pressure | i. Lab. Work |
| d. Dressing Wounds | j. Caring For Deceased Persons |
| e. Administering Drugs | k. Desk Work |
| f. Setting up and Using | l. Assembling Equipment |

Courtesy of Northeastern University, Boston, Massachusetts
Hiring Standards for Paramedical Manpower

Percentage Distribution of Working Time Spent on Job
 Functions by Licensed Practical Nurses



* Other Functions:

a. Teaching

b. Research

c. Intensive Care Unit

g. Supervisory

d. Sterilizing Equipment

e. Lab. Work

f. Desk Work

Courtesy of Northeastern University, Boston, Massachusetts
 Hiring Standards for Paramedical Manpower

March 27, 1973

Mrs. Selma Markowitz
Connecticut Institute of Health
Manpower Resources
770 Asylum Avenue
Hartford, Connecticut 06105

Dear Selma:

The following will address itself to only the three occupations we talked about NA, LPN, and AD. You may find people asking about the B.A. RN or the M.A. RN and of course it could be carried that far and perhaps someday should.

First--Develop a task analysis instrument with the following five components, job skills (observable), job knowledges (related to job skills), behaviors, basic skills, and equipment. Have each occupation work independently and then pool the results, cross checking commonalities, wording and finally agreeing on one instrument.

Second--Select your population to be interviewed. Make every effort to make it representative and involve all hospitals, etc.

Third--Allow the computer to analyze the data based on pre-determined criteria for acceptance into the curriculum. Have it print out the commonalities between the occupations, thus giving you the career ladder you are looking for.

Fourth--Taking the commonalities and the accepted tasks, indicate pre-requisite information (if any) for each and transpose into performance terms.

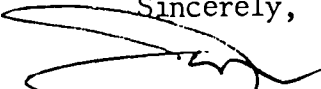
Fifth--Indicate a sequence or sequencing which the tasks can be learned.

Sixth--You can go so far as to develop a modular approach or merely "criterion reference" testing for key points in training. These tests must be accepted as evidence that certain skills exist.

If this much is done, you can see it really matters naught at which grade level the learning takes place, but rather that it does take place and the student can show evidence that they have learned and thus can apply.

I realize this isn't much, but maybe it will help with the State Department meeting. If you decide you want my further involvement, I will know more about my private consulting schedule after this week. Thanks again.

Sincerely,



Jan Danford, Coordinator
Instructional Services

JD:pc

CAPITAL AREA CAREER CENTER
INGHAM INTERMEDIATE SCHOOL DISTRICT
621 HAGADORN ROAD MASON, MICHIGAN 48854

May 10, 1973

Mrs. Selma Markowitz
Connecticut Institute of Health
Manpower Resources
770 Asylum Avenue
Hartford, Connecticut 06105

Dear Mrs. Markowitz:

I don't know how you are doing in obtaining the necessary cooperative commitments on the part of your people. However, this is written assuming that this has been accomplished. May I suggest that I either review for you the adopted California task analysis that should include your inputs or that I sit down with two to four people and help them to draft such an instrument. We would then determine our population to be surveyed, bring the data back, and work with Hartford in computerizing the results. This will then allow us to properly analyze the data and make decisions accordingly. I would need a representative from each agency (Agency Appr. Comm.) who has the authority to make decisions for that agency. Next, I would suggest we train two or three people on the writing of performance objectives, based on the above accepted tasks. They would then be re-reviewed and approved by the Agency Appr. Committee for practicality and accuracy. The next step would be to take the same two to three people and teach them to transfer that into individualized learning packages or modules, the selection of appropriate instruction material, etc.

It is estimated, Selma, that the first training and implementation session should be two intensive work days. I could do two things during that period of time; first teach those involved how to develop and conduct a task analysis, and second, while they are working, I could be teaching the other two to three how to write performance objectives.

On the other hand, you may have someone on your staff or in your state that could guide some of this, thus saving you dollars. Well, whatever hope things are moving right along. Thanks again.

Sincerely,


Jan Danford, Coordinator

JD:pc

NURSING ARTICULATION STUDY

BIBLIOGRAPHY

- "Aides Climb 'Ladder' to LPN Status." Am. J. Nurs. 69 (March 1969), 470-471.
- Aisen, May W. "Up the Vocational Stairs." Am. J. Nurs. 70 (December 1970), 2614-2617.
- "Alabama Hospital School of Nursing Starts Advanced-Standing Programs for LPNs and Medical Corpsmen." A H A Newsletter Hosp. Sch. Nursing. 4 (February 1971), 1-2.
- Alexander, Carol. "Certification and/or Re-licensure." AORN Journal. 16 (July 1972), 23-25.
- Allied Health Education Programs in Junior Colleges, 1970. (Directory)
Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1972.
- "A M A House of Delegates Reaffirms Support of Hospital Schools of Nursing." A H A Newsletter Hosp. Sch. Nursing. 2 (July 13, 1971), 1.
- American Council on Education. The Allied Health Professions Act. Special Report on Federal Programs. Edited by Pryor, Betty. Washington, D.C.: American Council on Education, 1966.
- Anderson, Bernice. Nursing Education in Community Junior Colleges. Phila.: J.B. Lippincott Co., 1966, 3.
- Anderson, Viola. "Who's Who in the Hospital." Today's Health. (October, 1970), 64-65.
- Asplund, Brita. "The Nurse's Role Tomorrow." International Nursing Review. 13 (December 1966), 25-33.
- Ausmus, Marlene and Lefkowitz, Annie. "Opportunities in Sub-professional Health Shortages." Occupational Outlook Quarterly. 14: 7 (Winter, 1970) 6-7.
- Bachu, A. "This I Believe. . . Inservice Educational Programs." Nurs. J. India. 61 (February 1970), 39.
- Bangs, Frank K. "Duties, Knowledges, and Skills Required of Medical Record Librarians." Unpublished Ph.D. dissertation, School of Education, Indiana University, Bloomington, Indiana, 1952.
- Betzold, K.V. "Educational Preparation for Nurse Practitioners and Assistants to Nurses." (A position paper) Alumnae Mag. (Balto.) 65 (September 1966), 50-54.
- Boehret, A. C. "The First Rung: the Challenge Examinations for LPNs in AD Programs." Bedside Nurse. 3 (September 1970), 19-20.
- Bolino, August C. Manpower and the City. Cambridge, Mass.: Schenkman Publishing Co., 1969.

BIBLIOGRAPHY (continued)

- Drage, Martha. "Core Courses and a Career Ladder." Amer. J. of Nurs. 71: 7 (July 1971), 1358.
- Drucker, Peter. The Age of Discontinuity. New York: Harper and Row Pub., 1969, 321-323.
- "Educational Programs in Areas Allied with Medicine." JAMA. 214: 8 (November 23, 1970), 1529-1533.
- Elliott, Robert. "The Current Nursing Situation." J. Of Medical Education. 44: 3 (March 1969), 178-183.
- Engel, J. "Nurses' Aide to Licensed Practical Nurse Upgrading Program." J. Pract. Nurs. 20 (May 1970), 26-30.
- "First Illinois LPN-to-RN Project to Start in September." AHA Newsletter Hosp. Sch. Nurs. 2 (April 20, 1970), 1-2.
- Flynn, A.F. ANA Position Paper (President's Message). Alabama Nurse. 20 (June 1966), 3-6.
- Forest, Betty. The Utilization of Associate Degree Nursing Graduates in General Hospitals. The League Exchange, No. 82, Code #23-1290, NLN, 1968, 8-9.
- Four Task Forces Report to the Connecticut Commission for Higher Education - A Summary of their Recommendations: Action for the Seventies. December 1970.
- Fry, Hilarg. Education and Manpower for Community Health. Pennsylvania: Univ. of Pittsburgh Press, 1967.
- Garfield, Sidney R. "Prevention of Dissipation of Health Services Resources." A.J.P.H. 61: 8 (August 1971), 1489-1506.
- Gilpatrick, Eleanor. Health Services Mobility Study. Research Reports 4, 5, 11, 12. The Research Foundation, City University of N.Y., 1972.
- Ginzberg, Eli. Manpower Agenda in America. N.Y.: McGraw-Hill Book Co., 1967.
- Glasgow, John N. Registered Nurse Supply and Demand: National Reports and Connecticut Projections. (Planning Document.) Office of the Vice President for Health Affairs, U. of Connecticut (October 1971). Mimeographed.
- Goldstein, Harold. "America's Manpower Needs for the Seventies: Clues to the Tasks Ahead." American Vocational Journal. 46: 4 (April 1971), 18-45.
- Goldstein, Harold and Horowitz, Morris. "Restructuring Paramedical Occupations: A Case Study." Dept. of Economics, Northeastern University, January 1972.
- Gruendemann, B.J. "Position of the Position: ANA First Position Paper on Education for Nursing." (ED). AORN. 12 (November 1970), 15-16.
- Holloway, Lewis and Kerr, Elizabeth. (Ed.) Review and Synthesis of Research in Health Occupations Education. Columbus, Ohio: Center of Research and Leadership Development in Vocation and Technical Education, Ohio State U., May, 1969.

BIBLIOGRAPHY (continued)

- Brown, Elsa. "Key Problems in Implementing Associate Degree Nursing Programs." NLN Associate Degree Education, Current Issues: 1969. Paper presented at the Second Conference of the Council of Associate Degree Programs, 1969, 8.
- Bumstead, R.A. "Nurses Aides Make Upgrading Work." Manpower. 3 (March 1971), 8-13.
- Bush, Nancy E. et al. Survey of Nursing Attitudes Toward the Expanded Role. University of Connecticut Health Center, Dept. of Pediatrics. January 1973. (mimeographed).
- Channing, R. M. "The Utilization of Associate Degree Graduates." New Jersey Nurse. 25 (November-December 1969), 41-47.
- Chater, Shirley. "Nursing Education for the Community." Paper presented to the Joint Meeting 49th Annual American Association of Junior Colleges: Annual meeting NLN Council of Associate Degree Programs. Atlanta, Ga. (March 1969), 4.
- Connecticut Commission on Nursing. Recommendations of the Connecticut Commission on Nursing from the Study of Nursing Needs and Resources in Connecticut. February, 1967.
- Connecticut State Department of Health, Public Health Nursing Division. Lundquist, Norma, R.N., M.P.H., Project Director. Inactive Health Professionals Project: Final Report. (1970). Connecticut State Department of Health.
- Craft, Janet S. "Nursing Pioneer in Columbia, One of the 'New Towns'." Registered Nurse. (July 1971), 26-29.
- "Credit for NON-Credit?" (Edi.) J. Cont. Educ. Nursing. 2 (March-April 1971), 54-56.
- Crum, Dwight R. "Implication for Planning Vocational Educational Resources." Amer. Vocational Journal. 46: 4 (April 1971), 26-29.
- DeChow, Georgeen H. "The Associate Degree Programs." RN (May 1971), 68.
- Dehoyos, A. "Nusing Leaders in Indiana React to the ANA Position on Nursing Education." AM. J. Nurs. 68 (November 1968), 2390-2395.
- Department of Nursing Education, Penn. Valley Community College, Kansas City, Mo. Unpublished material sent from college: description of career ladder curriculum. April 1971.
- Diehl, Harold. Healthful Living: A Textbook of Personal and Community Health. 7th Edition. New York: McGraw-Hill Book Co., 1964.
- Division of Vocational Education, Connecticut State Department of Education and the Labor Education Center of the University of Connecticut. Health Service Occupations: Occupational Needs, Educational Requirements. 1967, 12.

BIBLIOGRAPHY (continued)

- "Illinois Hospital Receives 'Go-ahead' for Program to Upgrade LPNs." Hosp. Top. 48 (June 1970). 18.
- Imrie, V. J. "Basic Nursing Careers." Brit. Hosp. J. Soc. Serv. Rev. 81 (July 31, 1971). 1545.
- Katzell, M. E. "Upward Mobility in Nursing." Nurs. Outlook. 18 (September 1970) 36-39.
- Kingsbury, V. "The ANA's Position Paper on Educational Preparation for Nurse Practitioners and Assistants to Nurses." Bull. Texas Nurse Asso. 40 (July-August 1966), 17-24.
- Kinsinger, Robert. "Personal Resources Development for Health Occupations Education." J. of Medical Education. 46: 2 (February 1971), 124-133.
- Kintgen, J., "The Case for Career Ladder Approaches." Chart. 67 (November 1970), 259-263.
- Kintgen, J., Interpretation of Literature on Career Ladders and Lattices in Health Occupations Education. Columbus, Ohio: Center for Vocational and Technical Education. Ohio State University, September, 1970.
- Kintgen, J. "Upward Mobility in Education: Are the Foundations Firm?" Paper presented at the Council of Practical Nurse Programs. Miami Beach, Florida. (May 1970), 2.
- Kramer, M. "Credit for Competency." AM. J. Nurs. 70 (April 1970), 793-798.
- "'Ladder' Planned by Northeastern, Boston, to Qualify Licensed Practical Nurses as Registered Nurses." AM. J. Nurs. 70 (January 1970), 30.
- "Ladder System Outlined: Guide to RN." AM. J. Nurs. 68 (August 1968), 1743-1744.
- "Landmark Statement from the ANA on Inservice Education." J. Contin. Educ. Nurs. 1 (May 1970), 20-25.
- Lattizori, Carmella. "Where Have All the Nurses Gone?" Conn. Health Bulletin. 83: 2 (February 1969), 43-52.
- Lecht, Leonore. Manpower Needs for National Goals in the 1970's. New York: Frederick A. Praeger Publishers, Inc., 1969.
- Leone, Lucille. Statewide Planning for Nursing Education. Southern Regional Education Board, Atlanta, Georgia. 1967. 3.
- Lewis, Irving. "Government Investment in Health Care." Scientific American. 224: 4 (April 1971), 17-25.
- Lewis, M. D. "The Position Paper." Colorado Nurse. 68 (March 1968), 3-6.

BIBLIOGRAPHY (continued)

- Lewis, Wiley. Review and Analysis of Curricula for Occupations in Health. Columbus, Ohio: Center for Vocational and Technical Education, Ohio State University. November 1970.
- "Licensed Practical Nurse Upgrading Program to Open in New York: Hunter College." AM. J. Nurs. 69 (May 1969), 929-930.
- London, Irving. "The University, the Community, and the Nation's Health." J. of Medical Education. 46: 1 (January 1971), 18-23.
- Long, June. A Proposal for the Conduct of Practical Nurse Education Program by Manchester Community College in Cooperation with Hartford Hospital. (February 1972). Mimeographed.
- "LPNs, Ex-medics Offered Advanced Standing: Providence Hospital School of Nursing, Mobile, Alabama." AM. J. Nurs. 71 (March 1971), 455.
- Magner, M. "Program Gives Nurses' Aides Opportunity for Advancement." Hosp. Top. 49 (March 1971), 36-37.
- Matheney, Ruth. "Technical Nursing Practice." NLN, Dept. of Associate Degree Programs, 1967.
- McAtee, Patricia and Silver, Henry. "Health Care Practice: An Expanded Profession of Nursing for Men and Women." AM. J. of Nurs. 72 (January 1972), 78-80.
- McCarragher, Barbara. "Health Manpower: Inactive Health Professionals Project." Connecticut Health Bulletin. 84:6 (June 1970), 147-153.
- McClusky, J.A. "Ladder Education--Why Not? A Challenge to Nursing Educators." J. Pract. Nurs. 20 (May 1970), 24-25.
- McCoy, Leahmae. "The Medical School as Coordinator of Health Services." J. of Medical Education. 46: 2 (February 1971), 134-141.
- McMenemy, A. "Advanced Standing Diploma Program for LPNs: Providence Hospital School of Nursing, Southfield, Mich." Hosp. Progress. 51 (September 1970), 77-89.
- McMullan, D., "Nursing Education and Career Mobility: Two Views." MLN Bulletin. 18 (November 1970), 3-6.
- McTaggart, Aubrey. The Health Care Dilemma. Boston: Holbrook Press, Inc., 1971.
- "Michigan Grants Credit for 'Life Experience'" AM. J. Nurs. 71 (September 1971), 1690.
- Montag, M.L. "The Associate Degree Nursing Program: Its Philosophy and Objectives." Chart. 67 (March 1970), 80-86.
- Montag, M. "Debate: Ladder Concept in Nursing Education." Nursing Outlook. 19: 11 (November 1971).
- Montag, M. The Education of Nursing Technicians. N.Y.: Wiley, Co., 1951.

BIBLIOGRAPHY (continued)

- Montag, M. "Preparation of the Associate Degree Graduate." N.J. Nurse. 25 (November-December 1969), 24-32.
- Montag, M. "Reflections on the Past 20 Years and a Look in to the 1970's and 80's" Associate Degree Education--Current Issues--1970. Paper presented at the Third Conference of the Council of Associate Degree Programs, NLN Publ. #231411. 68.
- "Moving Up the Career Ladder." AHA Newsletter Hosp. Sch. Nursing. 2: 1 (July 1970).
- Mull, A. "Vertical Mobility and the Ladder Concept - An Answer to the Nursing Shortage." Imprint. 17: 4 passim. (March 1970).
- Murphy, M.I. "Thoughts on the Open Curriculum--the Ladder Concept in Nursing." Alumnae Mag. (Balto.). 69 (June 1970), 26-30.
- National Commission for the Study of Nursing and Nursing Education. An Abstract for Action (Lysaught Report). N.Y.: McGraw-Hill, Inc., (1970), 107.
- National Commission on Community Health Services. Health is a Community Affair. Boston, Mass.: Harvard Univ. Press, 1967.
- National League for Nursing, Council on Baccalaureate and Higher Degree Programs, Challenge to Nursing Education. New York. National League for Nursing, Dept. of Baccalaureate and Higher Degree Programs, 1971.
- National League for Nursing, Department of Associate Degree Programs. Criteria for the Evaluation of Educational Programs in Nursing Leading to an Associate Degree. 1967, p. iv.
- National Task Forces Project Communication of Community Health Services. Health Manpower. Wash., D.C.: Public Affairs Press, 1967.
- "Needed: Articulation Between Nursing Education Programs and Institutions of Higher Learning." Nursing Outlook. 8: 34 (December 1970), 371.
- "New Program to Aid Licensed Vocational Nurses Become RNs." AHA Newsletter Hosp. Sch. Nursing. 2: 1 (April 6, 1970).
- "New School to Offer 'Ladder' from Aide to RN: Modesto, Calif." AM. J. Nurs. 71 (February 1971), 217-218.
- "NLN to Begin Projects to Help Students and Schools Achieve Objectives of Open Curriculum." NLN News. (March-April 1971), 3.
- "North Eastern University Offers Associate Degree Program for LPNs." AM. J. Nurs. 70 (July 1970), 1434.
- "Nursing Education Opportunities, Inc." Nursing Outlook. 20 (February 1972), 100-102.
- "Nursing Education in the Seventies." Nurs. Outlook. 20 (April 1972), 271-272.

BIBLIOGRAPHY (continued)

Occupational Outlook Handbook. 1970-71 Edition. U.S. Department of Labor. Wash., D.C.: Government Printing Office, 1970.

Occupational Outlook Handbook. 1972-73 Edition. U.S. Department of Labor. Wash., D.C.: Government Printing Office, 1972.

Ogden, J. "Upward Mobility of Licensed Vocational Nurses." Jun. Coll. Journal. 40 (April 1970), 45-47.

Olson, Edith. "Needed: A Shake-up in the Status Quo." AM. J. Nurs. 68: 7 (July 1968), 1491.

"Opportunities for Education in Nursing." (An NLN Statement on Nursing Education) Nursing Outlook. 8 (September 1960), 484.

"Pennsylvania Nurses Association Starts Working Toward Career Ladder." AM. J. NURS. 70 (August 1970), 1647.

Pilot, Michael. "Health Manpower in 1980." Occupational Outlook Quarterly. 14: 4 (Winter 1970), 2-3.

Pinsky, David, Health Service Occupations, Occupational Needs, Educational Requirements. 1967-1971-1976 -- Connecticut and its Areas. Labor Education Center, U. of Connecticut (September 1967).

Points, Thomas. "The Development, Concern and Program of the AMA Community on Emerging Health Manpower." Medical Care. 9: 1 (Jan.-Feb. 1971), 4-6.

"Program Advances Nurses Aides to Assistants: St. Louis." Hosp. Man. 111 (Feb.-March, 1971), 32.

"Program Started to Upgrade Nursing Aides to LPNs: New York City." Hosp. 45 (Jan. 1, 1971), 98.

Quarmby, Mary. A Study to Determine the Need for the Establishment of an Additional Baccalaureate Program of Nursing Education in the Greater Hartford Area. Prepared for the Health Care Facilities Planning Council for Greater Hartford, Inc. July, 1969.

Ramphal, Marjorie. "Needed; A Career Ladder in Nursing." AM. J. Nurs. 68:6 (June 1968), 1234.

Randall, J.L. "Nursing as a Career: A Guide for Counselors." Weather Vane. 39 (October 1970), 5-11.

Rennell, M. and Hoover, D. Health Manpower Source Book: Section 21: Allied Health Manpower Supply and Requirements: 1950-1980. Wash., D.C.: U.S. Dept. of Health, Education, and Welfare, May 27, 1970.

Report of the Surgeon General's Consultant Group on Nursing. Toward Quality in Nursing. Wash., D.C.: U.S. Dept. of HEW, Public Health Service Publication no. 992, 1963.

BIBLIOGRAPHY (continued)

- "Requirements for Medical Manpower." World Med. Journal. (Sept.-Oct. 1969), 105-106.
- Reres, M. and Robinson, A. Your Future in Nursing Careers: A Definitive Study. N.Y.: Richards Rosen Press, Inc., 1972.
- "Resolution on Vertical Career Mobility in Nursing Education: AHA" AHA Newsletter Hosp. Sch. Nurs. 3 (Dec. 28, 1970), 1-2.
- Saman, L. A Proposal: An Associate Degree Nursing Program at Manchester Community College. (December 1971). Mimeographed.
- Saman, L. The Report of a Study to Determine the Feasibility of Establishing an Associate Degree Nursing Program at Manchester Community College. July 1971.
- Sanazaro, P. "A New Generation of Options for Academic Health Centers." J. Of Medical Education. 46: 1 (January 1971), 11-17.
- Schmidt, M. Factors Affecting the Establishment of Associate Degree Programs in Nursing in Community Junior Colleges. The League Exchange No. 77, 1966, 74.
- Schudy, S. "The Associate Degree Nursing Program at Norwalk Community College." Nursing News (Hartford). 43 (October 1971), 11.
- Segal, E. Status of Professional Nursing Education in Connecticut. A Report to the Commission for Higher Education Prepared by Office of Regional Activities, Yale University School of Medicine. June 1971. Mimeographed.
- Sherrod, E. "Bottom-side Up in Nursing Education." J. Prac. Nurs. 21 (June 1971), 254.
- Shetland, M. "This I Believe. . . About Career Ladders, New Careers, and Nursing Education." Nurs. Outlook. 18: 9 (September 1970).
- Shuffield, C. "Upgrading Nurses' Aides." Hosp. 44 (Dec. 16, 1970), 61-64.
- Silver, H. "The School Nurse Practitioner Program." J.A.M.A. (May 24, 1971), 1332-4.
- Sochler, A. "Worldly Health Problems -- Need 100% Manpower Increase." Pathway to Health Careers. (April 1971), 2.
- Spring, F. "A Response to: Thoughts on the Open Curriculum--the Ladder Concept in Nursing." Alumnae Mag. (Balto.) 69 (June 1970), 31-32.
- "Statement Addressed to the Connecticut Commission for Higher Education in Recommendations of Four Task Forces Report to the Commission on Higher Education." Joint Education Committee of the Conn. Nurses' Asso. and the Conn. League for Nursing, 1971, 4.
- "Statement of Beliefs on the Education of Practical Vocational Nurses: National Federation of Licensed Practical Nurses." Bedside Nurse. 1 (Jan. 1968), 11.
- "Statement on Continuing Education in Practical Vocation Nursing." J. Prac. Nurs. 18 (September 1968), 26.

BIBLIOGRAPHY (continued)

- Teeple, J. "Planning Vocational Programs to Meet National Goals." Amer. Vocational Journal: 44:8 (November 1969), 31-33.
- Theimann, N. Handbook on Job Facts. Chicago: Science Research Ass., 1968.
- "Two Approaches to Upgrading Nurses Aides." Cross Reference. (March 1971), 10.
- The UCLA Allied Health Professions Projects: Nursing Occupations Progress Report. April 1971. U. of Calif., Los Angeles; Division of Vocational Education. Allied Health Professions Projects, 31.
- U. of Calif., Los Angeles, Division of Vocational Education, Allied Health Professions Projects. The UCLA Health Professions Projects: Interim Report: A Study of Nursing Occupations. April 1970, pp. ix-x.
- "Upgrading Nurses' Aides to LPNs through a Work-Study Program." Manpower Research Visibility. 47: 1 (January 1972), 91-92.
- U.S. Dept. of HEW; Public Health Service, National Institutes of Health. Equivalency and Proficiency Testing--A Survey of Existing Testing Programs in Allied Health and Other Health Fields. 1970, 49.
- U.S. Dept. of HEW; Public Health Service. Health Manpower Source Book: Sec. 2: Nursing Personnel. 1969, 128.
- Vogue, E. The Bureau of Labor Statistics. N.Y.: Frederick A. Praeger Pub., Inc., 196
- Walden, I. et al. "'I Never Knew I Could Learn So Much' Said a Waiver LPN. Special Report on the Colorado Waiver Nurse Program." Bedside Nurse. 3 (May 1970), 15-20.
- Waters, V. et al. "Difference in Nursing Practice Between Graduates of Associate Degree and Baccalaureate Degree Programs. Associate Degree Education - Current Issues, 1970. NLN Publ. # 23-1411, 1970, 25.
- Wood, L. Career Model for Nurse Practitioners. U. of Calif.: L.A. Division of Vocational Education, March 1972.