This document is a summary report of a 3-day conference held in November 1972 by the Health Occupations Teacher Education Program within the Division of Vocational Education of the University of Georgia. The conference focused on an emerging issue in health occupations education, articulation of programs. Basic problems in the health field are job nomenclature and competence specification, manpower planning, and educational planning to provide qualified personnel at all levels. Participants in the conference were leaders in allied health occupations and faculty and staff from four health specialties: dental auxiliaries, clinical laboratory, patient care, and respiratory therapy. The document includes a summary of the group sessions reports and participants' evaluation of the conference. The evaluation forms, conference participants and consultants, daily agenda, and supportive materials are appended. It was recommended that a series of workshops be held on curriculum modifications and that a center be established for the collection and dissemination of materials related to a sequential curriculum in allied health occupations. The conference proceedings and presentations will be issued separately. (MF)
FINAL REPORT

Conference on Career Development and Program Articulation in Health

Mary Elizabeth Milliken, Ed.D.
Project Director

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Department of Health, Education, and Welfare
Bureau of Health Manpower Education
Regional Office IV

University of Georgia
College of Education
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Conference on Career Development and Program Articulation in Health

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The Health Occupations Teacher Education Program within the Division of Vocational Education, College of Education, University of Georgia was established to serve health professionals whose career development has created the need for competencies related to effective functioning in the field of education. An ancillary responsibility for a teacher education program is to provide leadership for educational personnel to be aware of and informed about trends and issues in their respective fields. In view of this responsibility, the Health Occupations Teacher Education Program responded positively to a request from the Bureau of Health Manpower Education, Region IV to provide a regional conference which would focus on an emerging issue in health: namely, articulation of programs to permit progress from one job level to the next without unnecessary duplication of courses or prolongation of time spent in the educational program. It is widely recognized that in terms of manpower utilization it is impractical and unrealistic to require persons with specific competencies to meet clock-hour requirements in an educational program in order qualify for credentialing. Several alternatives have been proposed to counter existing policies which do not recognize an applicant's competencies; e.g., proficiency testing, equivalency testing, on-the-job training, and continuous progress curriculums.

In July of 1971, the American Hospital Association sponsored a national conference dealing with the concept of career mobility. Other national organizations and professional organizations in various health specialty areas have been looking at the continuous progress curriculum. Proficiency and equivalency examinations are being used, not extensively, but to some extent in certain areas of the health field. These emerging approaches to the recognition of job competence acquired other than in a traditional formal type of educational program are evidence that new approaches to credentialing may in the future be developed to permit competence credit in lieu of clock-hour credit. In view of these emerging trends and evidence of need for revising curriculums and performance standards related to credentialing of health workers, the Health Occupations Teacher Education Program
conducted a regional conference to provide opportunities for leadership personnel in the eight states of Region IV to discuss the feasibility of cooperative curriculum planning as a means of articulating health preparatory programs at two or more levels in selected health specialty areas. This conference was provided in response to a request from the Bureau of Health Manpower Education, Region IV, Department of Health, Education, and Welfare. This document is a summary report of the three-day conference, held in Atlanta, Georgia at the Sheraton-Biltmore November 6, 7, and 8, 1972. Presentations by the consultants will be reproduced in the near future as "Conference Proceedings."

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During the past decade there has been increasing public and professional concern directed to the problems of health delivery systems, health manpower needs, and preparatory programs for increasing the numbers of qualified personnel to staff health agencies. An issue of direct concern to educational planners is that of career ladders and lattices, proposed by some as a means of improving manpower utilization. This issue is receiving much attention in the current literature, but the activity seems to consist primarily of talk and conjecture about the potential of this concept to facilitate the preparation of health personnel. Unfortunately, an operative model seems to be lacking; in fact, any reports of detailed planning, implementation, and evaluation are difficult to locate.

The whole issue of career mobility is clouded by the present ambiguity of job titles, by lack of standardized nomenclature in the health field, and by continuing proliferation of job titles which do not indicate the incumbent's level of practice or specific competencies. This problem underlies the broader problems of manpower planning and educational planning, providing a common base for cooperative planning. Ultimately, there should be a set of correlated job titles and educational programs, with mutual (employer-educator) agreement on the competencies required for graduation from a program and entry into employment at each level.

There is, then, an interrelatedness of these basic problems in the health field: job nomenclature and competence specification; manpower planning; and educational planning to provide qualified personnel at each of several levels of practice. (NOTE: In 1970, forty curriculums designed to prepare personnel at the less-than-baccalaureate level in eighteen different specialty areas were fundable through vocational education!)

PURPOSES

The Conference on Career Development and Program Articulation was designed to bring opinion leaders and policy-makers in allied health occupations together with practitioners and teachers from four health specialties: dental auxiliaries, clinical laboratory, patient care, and respiratory therapy.

The purposes of the conference were as follows:

1. to provide opportunities for faculty members of basic preparatory programs in four areas of health to learn about methods for specifying functional differences between the entry-level and technical-level workers;
2. to encourage curriculum planning based on performance specifications for the level of practice at which graduates of basic health programs would enter employment;
3. to stimulate discussion of the implications of occupational analysis for a) instructional planning, b) performance specification, and c) job classification;
4. to provide opportunities for faculty members of two or more levels to interface through discussion of common problems and concerns; and
5. to encourage discussion among faculty members of programs at various levels regarding the feasibility of cooperative curriculum planning, to provide articulation between the programs without unnecessary duplication of course content for the student.

PARTICIPANTS

The health occupations supervisors in the eight states of Region IV were asked to submit a list of persons who should be informed about the conference. Announcements (Appendix A) were sent to each person named by the health occupations supervisors and also to the following: 1) officers of dental assisting and dental hygiene professional organizations,
2) officers of the medical laboratory organizations, 3) faculty and coordinators of practical nursing programs in Georgia, 4) respiratory therapists (as names were obtained from a variety of sources), 5) persons who had previously requested notification of activities conducted by the Health Occupations Teacher Education Program at the University of Georgia, and 6) deans of schools of allied health in the eight states of Region IV.

The announcement was received enthusiastically throughout the region; however, because of conflicts with this scheduling, many persons who wished to attend could not do so. Final registration for the conference totaled 01, representing each of the eight states in Region IV. A list of participants is provided in Appendix A.

PROGRAM

Design

The program for the conference was designed to lead the participants through the following sequence: 1) awareness of selected concepts from economics related to manpower and educational planning, 2) understanding of occupational and task analysis as methods for studying occupational performance requirements, 3) involvement in discussing possible applications of economics concepts and task analysis to planning for manpower and training needs in health, 4) involvement in the process leading from analysis of a task to formulation of instructional objectives, 5) awareness of the trend toward secondary level programs in health careers, 6) recognition of commonalities in instructional content of some educational programs which prepare personnel for the health field, and 7) consideration of an example of a sequential curriculum design which resulted from occupational analysis of performance requirements at several levels within a health specialty area.

Program Consultants

The consultants selected to assist in presenting this program possessed expertise and direct personal experience in one or more components of the sequence described above. Three members of the Allied Health Professions Project at the University of California at Los Angeles reported on their
particular components of that extensive project: Dr. Thomas Freeland, Mrs. Lucile Wood and Miss Diane Watson. Mrs. Barbara Killen, an economist-educator with extensive involvement in planning for the health field, presented economics concepts related to program-planning in health.

A resume of the background and experiential qualifications of each consultant is provided in Appendix B. Also in Appendix B is a list of those who participated on the panel "Innovative Approaches in Allied Health Occupations Education," served as group leaders, or presided at one or more general sessions. These volunteer participants represented four different health specialties, three functional levels (local, state, and regional) and each of the eight states in Region IV.

Results

Presentations of the four consultants are being transcribed for dissemination to conference participants and other interested persons. The supportive material provided by the keynoters for their presentations is included in this report as Appendix C. This material is organized in chronological sequence and separated by the color-coded sheets used for the conference program. Omitted from the supportive materials are approximately twenty five sheets which were included in participants' program for "controlled note-taking"-space under the major heading of each keynoter's presentation. These sheets also served to direct the activities in task analysis.

In addition to the Conference Proceedings, to be issued later, the results of the conference include group reactions resulting from state caucuses and discussion groups. For purposes of this report, the group reports have been compiled without reference to their source (specific group). The following summary, then, constitutes a compilation of main ideas which emerged during group activities.

1. A centralized information center is needed for the sharing of information, ideas, materials, and curriculum guides among states and among the different health specialty areas.
2. In order to improve the cost-effectiveness base for allied health occupations, we need to find ways of a) giving credit for demonstrated competence, b) measuring an applicant's "real" competence, c) developing proficiency tests which measure both theoretical information and ability to perform, d) developing course challenge exams which are fair and which assure that those who pass have the desired competencies.

3. Faculties of programs need to plan cooperatively if programs at two different levels are to be articulated; i.e., the upper level program curriculum should be organized so that advanced placement is possible for graduates of the lower level programs.

4. Proficiency tests to be used for credentialing (on the basis of non-traditional learning experiences) or advanced placement should be developed as a cooperative adventure of faculty members from both programs.

5. An employing health agency should have a planned, formal orientation program to assist new graduates of any preparatory program to fit into the agency's organizational structure.

6. Any allied health occupations curriculum should prepare students to fulfill the responsibilities they will be expected to assume when they enter employment.

7. Allied health occupations programs should teach students about their roles -- limitations as well as responsibilities.

8. Practitioners should have lateral as well as vertical mobility available to them.

9. Some components of preparatory programs should be individualized to permit self-pacing; proficiency testing can assure that the student has achieved the desired competence regardless of the number of clock-hours invested in the learning experience.

10. Curriculum development is a time-consuming process requiring specific skills; there is need for curriculum specialists in allied health to work with faculties in developing cost-effective instructional programs.

11. There is need for standardization of job titles and clarification of performance requirements of jobs in the health field.

12. Health services should be provided to patients at the least possible cost; this will require cost-effective educational programs and efficient utilization of all health personnel.

13. Interpersonal skills, needed by health workers at all levels, should be a component of the preparatory program.
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14. The Allied Health Professions Project materials -- specifically, the occupational analyses -- can be adapted in each local area as basic materials for instructional planning. These materials represent a tremendous effort -- perhaps 99% of the "spade work" for instructional planning.

15. The occupational task lists reported by the AHPP have been submitted to large numbers of reviewers and probably have a high level of validity for current practice.

16. We need to get away from thinking that adding more and more education assures higher levels of competence; this is a false assumption.

17. The AHPP methodology appears useful for studying existing curriculums in health specialty areas.

18. Task analysis is a logical starting point for instructional planning; it has the advantages of efficient use of time and effort for both teacher and student.

19. There needs to be better communication among disciplines in the health field.

20. Legislators are beginning to look at the cost factor in the education of health workers; the legislature in one state is already conducting a cost analysis for each program offered in the public education system.

21. The AHPP has produced a large volume of material at considerable public expense; it is not reasonable for others to attempt to duplicate this effort other than to validate questionable components in the local situation.

22. While radical curriculum revision may require "buckling the system," policies can be formulated to permit minor curriculum revisions and advanced standing based on proficiency testing.

23. Methods for selecting students should be revised; educational preparation of health workers should be competency-based; clock-hour requirements for completion of a program do not assure competence; the question of who is to initiate changes in legislation, regulations, standard-setting and credentialing, needs to be resolved.

24. The majority of faculty members in allied health occupations programs probably would not buck the system but would wait for credentialing agencies to take the leadership in bringing about a competency-based approach to credentialing and/or educational planning.
A program to prepare personnel for patient care could have one entrance point and several different spin-off points.

There should be coordination between hospital programs preparing health workers, vocational education programs, and junior college programs.

Obstacles to program articulation include the following:

a. Sources of financing for different types of programs (e.g., hospitals, colleges or universities, school districts, postsecondary institutions, private institutions) set standards for the programs which result in diversity of graduates, overlapping between and among roles, and duplication of training opportunities.

b. Standards for faculty differ according to the sponsoring agency: standards in community colleges differ from standards in private or health-agency-based programs; requirements for teachers in high school health programs differ from all of these.

c. Differing philosophies are reflected in widely different approaches to selection of learning experiences for students. There's need to extend the use of competency and challenge tests in order to permit advanced standing for graduates of lower-level programs. Faculty members of allied health occupations programs should participate in educational planning conferences.

Articulation of educational programs at two or more levels is economical of time and money. By means of a sequential curriculum, some students could complete the program and be on the job as a contributor to health services in a shorter period of time than is generally required by clock-hour requirements.

Some state education agencies are moving toward a policy which would require a) that vocational programs articulate with junior college programs and b) that graduates of the vocational level program be permitted to qualify for advanced standing. Articulation can be interpreted to mean either a sequential curriculum, transferable credits, or both.

There is an experimental program which admits licensed practical nurses and qualifies them for professional nursing examination in a four-quarter program.

Faculty members in general are currently somewhat negative toward advanced placement for graduates of lower-level programs.

Some faculty members, particularly in higher-level programs, are opposed to task-oriented instructional planning.
33. According to an instructor who is using the Career Model for Nursing, the material is proving useful for preparing personnel for patient care. She found it necessary to prepare additional program materials, including guides and assignment sheets; once this material had been prepared, the sequential curriculum proved easier to implement than the traditional type of curriculum. Students adjusted to the materials readily and faster students showed a tendency to help slower students so that the class as a whole could move forward.

34. The viewpoint of a director of nursing service -- "the consumer of the product of a preparatory allied health occupations program":
   a. Nursing service should be asked to participate in evaluation of performance of advanced students;
   b. Practical nurses are confused with registered nurses by the public and others;
   c. There continues to be some role-confusion between registered nurses and practical nurses;
   d. Licensure is not an assurance of competence on the part of the practitioner.

35. In teaching aide-level programs, it has been found that potential students view the aide role as low-status unless it is designed for a specialty area, such as psychiatric aide or pediatric aide.

   In addition to these ideas expressed during group discussions, a number of questions were raised. Some questions were answered by other members of the group, while others remained unanswered. The following questions could serve as focal points for future conferences:

   1. How can technical education in a hospital or a vocational school be recognized for academic credit in an institution of higher learning?
   2. Who has had personal experience with a sequential program with several different exit points? (The group responded negatively to this question, but one member pointed out that Emory University now has such a program in Physical Therapy.)
   3. In a sequential program related to patient care, what would be the exit points? (Members of the group discussed this question and concluded that the first exit point would be to a job with the title of aide, and the second exit point would be at the practical nurse level; in order for there to be a third exit point, a cooperative arrangement with a junior college would have to be worked out.)
4. How does career education relate to the problems we are discussing here? (Miss Watson suggested that the Health Careers Orientation Program be instituted no later than grades seven, eight and nine; this should be followed in grades ten, eleven, and twelve by actual participation in job skills. The job experiences would be exploratory, to introduce the student to several different career possibilities. Following these experiences the student should be better prepared to make a vocational decision: whether or not to enter the health field, which specialty area of the health field to enter, and which level to view as the first career goal.)

5. How does this secondary program relate to specific jobs in the health field? Do students complete the program fully prepared for a particular job in health? (According to Miss Watson, the student's age and titles of particular jobs should not be emphasized at this level. Tasks should be selected for their exploratory value; the student should have a record which shows potential employers which skills he has learned to perform. Then, if the student does seek employment, the employer will have in writing an overview of what the student can do. Assignment of a job title to the high school program could be confusing to the high school program and could be confusing to students and future employers.)

Summary of Group Reports

In general, the group reports indicate participants' awareness of problems which face faculty members, students, and employers alike. While pat answers were not forthcoming, there was a willingness to exchange ideas and to examine new ideas and task analysis methodology objectively. Most participants indicated readiness for cooperative planning with their counterparts in the employing health agency or with faculty members of other programs.

It would appear, however, that among these participants -- opinion-makers and policy-makers in the health and education fields -- no one emerged as ready, willing and able to assume leadership in bringing about some of the changes which the majority agreed are needed. The group discussions provided a free exchange of ideas, with little if any antagonism or obstructionism expressed. This in itself is encouraging evidence of change in perceptions of what "should be" in allied health occupations!
EVALUATION

Forms used for participants to evaluate the conference are shown in Appendix B. It will be noted that these forms provide a rating scale extending between two polar statements, one negative and the other positive. This scale permits the respondent to rate an item positively or negatively, with the strength of reaction indicated by proximity of the rating to the polar -- or extreme -- position; the central numeral, five, indicates a zero or neutral rating.

The evaluation form also provided space for free responses. In addition, the evaluation form for Wednesday requested suggestions for the main focus of future regional conferences. The evaluation procedure, then, provided 1) ratings of individual components of the conference, 2) ratings of the conference as a whole, 3) comments about the conference, and 4) suggestions for the focus of future conferences.

Ratings on a Nine-Point Scale

The figures on the following pages represent graphs to show the distribution of responses on each evaluation item. Since group sessions were used primarily for discussing the presentations, only tentative plans were formulated; therefore, the scheduled session on action plans was omitted from the Wednesday program. Item twelve, pertaining to Reports of Action Plans, was omitted from participants’ evaluation of the Wednesday program.

EVALUATION: MONDAY

1. AN ECONOMIST-EDUCATOR LOOKS AT EDUCATION PROGRAMS IN RELATION TO PERSONNEL NEEDS IN ALLIED HEALTH OCCUPATIONS

Not relevant to my concerns        Spoke to important concerns in health
1    2    3    4    5    6    7    8    9

* Ratings at the poles are strong, decreasing in strength as they approach the neutral (5) position.

-10-
ALLIED HEALTH PROFESSIONS PROJECT:
OVERVIEW OF CURRICULUM DEVELOPMENT PROCESS

Highly significant: I do not see any application to my area of the health field.

GROUP SESSION: REVIEW OF AHPP OCCUPATIONAL INVENTORIES

Did not provide any "how to" help: Could be a useful method for attacking my problem.

GROUP SESSION: REACTION TO AHPP METHODOLOGY

Helpful, I gained new insight into planning: Provided no clarification or new ideas for me.

EVALUATION: TUESDAY

METHOD AND PROCEDURE FOR JOB OPERATION BREAKDOWN

Could be very useful: Of little or no use to me.

HOW TO DEVELOP PERFORMANCE STATEMENTS

Restated what I already knew: Helped me to see the value of clearly stated outcomes.
GROUP PRACTICE IN JOB AND SPECIFYING LEARNING OUTCOMES

I could use more help developing these skills strictly "old hat" to

CAREERS IN HEALTH SERVICES PROGRAM - SECONDARY LEVEL

Great idea; should help with recruit-

CONSIDERATIONS IN DESIGNING CURRICULUM FOR CAREER DEVELOPMENT

I don't have time for this kind of planning makes good sense; a faculty should give it a try before deciding whether or not it will work.

PANEL DISCUSSION: REACTIONS TO PROGRAM TOPICS

Panelists provided additional ideas; added little to the ideas already presented.
11. THE CAREER MODEL

An unsatisfactory design for curriculum in my area of the health field

A well-designed educational model; should solve some problems in the health field

13. THE CONFERENCE AS A WHOLE

Dealt with concerns of the utmost importance to the health field

Should have been directed to other, more important matters in the health field.

14. 

Presented ideas which should be implemented as soon as possible

Ideas presented are of little practical value in my area of the health field.
Comments Pro and Con

The following list includes all comments elicited from participants by the evaluation sheets. For the most part, these have been reproduced verbatim without interpretation. Where editorial explanation appeared necessary, the comment is provided in parentheses.

"I'm looking forward to tomorrow and Wednesday." (On Monday evaluation form)

"I need to think and learn more about this in its totality."

"Should have had more time on the AHPP model with it leading into a discussion of the career model. The economics presentation could have been covered with the handout."

"This is the type of meeting allied health coordinators should hold more often."

"Very Good!"

"These are not derogatory comments. I feel, perhaps, I may have contributed something and learned what others are doing." (Apparently the first sentence refers to somewhat weak ratings of the Monday presentations.)

"Nothing concrete!" (Comment related to item number four, group session for reactions to AHPP methodology)

"A very informative session. Discussions tended to bog down on philosophical disagreements and feelings of insecurity related to professional jealousy."

"I was able to listen and learn much. As a newcomer to this field, I have much to learn."

"None was too very relevant to service, but extremely useful in getting me on target." ("Service" refers to "nursing service.") "Although she had to win me over!" (Refers to item eight, rated one [1],-- extremely high on "Great idea; should help with recruitment.")

"Feel some presentations could have used methodology proposed for programs rather than reading lecture notes."

"Useful, interesting -- both in presentations and in opportunities to share ideas and problems with others in health programs."
"Subjects should be organized to bring content to a connected circle and elaborate more in the basic situations, not more unusual areas."

"The basic ideas were stimulating, but I was "turned off" by some of the presentations. The basic ideas seem to be usable but content on the practical implementation was lacking. Also the Career Model for Nursing with its five levels is not new. We now have too many levels. I can't see this clearing up issues in nursing education."

"Needed to ask the panel some questions."

"I personally would like to see more of these but in each specific job description level; example: nursing, dental, respiratory therapy, etc."

"Very good conference!"

"Good -- good conference. Thank you."

"A useful and meaningful conference."

"I think this conference was one which certainly stimulated educators in the health field."

"A stimulating, thought-provoking conference."

"An informative conference. However, information and materials presented in AHPP did not seem to present any new concepts. Conference could have started on a somewhat higher level. All considered -- a good conference!"

"Much material presented from the UCLA Allied Project was a reiteration of information already in hand."

"Excellent conference. Beautiful staff from AHPP. Thank you!"

"Informative and very much-appreciated conference. Thank you for all the work involved."

"This has been a most interesting conference. I am very glad I had the opportunity to attend."

"I am anxious to get started."

"State meetings needed organization."

"No specific objectives."

"Very good conference!"

"Most of the material was repetitious to me even though it is very relevant."
"UCLA AHPI group were too concerned with "teaching" conference participants about their "project." The conference would have been very beneficial if the AHPI group had attempted to meet the objectives of the conference."

"A good conference."

Obviously, the majority of the comments are positive. Those few which have negative connotations never-the-less contain valuable feedback for future conference planning. A number of participants took advantage of the opportunity to suggest ideas for future conferences:

1. Review of programs directly involved in program articulation, rather than a review of a model that has not been tried;
2. Get more South Carolina representatives there;
3. How to determine amount and depth of general education to be included and articulate with B.S. programs for the A.I. graduate;
4. Administrative implementation;
5. Will consider several and send our thoughts to Mr. Brown;
6. A follow-up -- are we doing what we have been talking?
7. A program involving those responsible for the planning and administration of health delivery with those responsible for similar activities in allied health occupations education;
8. Accreditation, registration, certification, and licensure problems of health workers;
9. Leadership development workshop;
10. Job, course, curriculum definitions;
11. Conference to focus on curriculum development;
12. Present day situations in health career fields; plans for new programs;
13. The focus for the next regional conference should be to go back home and work with designing educational models suitable to your own need.
Miscellaneous Feedback

It is noteworthy that a number of letters have been received since the conference, expressing appreciation and in some cases indicating definite follow-up action:

"... met with representatives from schools -- vocational level through masters level. Fifty-two attended the meeting. That was something on such short notice. In 1973, we plan to push forward as many of these ideas as possible. Higher levels of education may be slow."

"... The conference on career development was most informative. We feel that we received much which will be useful in our particular situation..."

"... (a specific program) is admitting fifteen of their graduate practical nurses in June 1973 and plans to graduate them as associate degree nurses in June 1974. There is yet so much to be done in all areas -- secondary and postsecondary, but we have to sell one step at a time..."

AND...

from the Far West:

"On November 1, 1972 the New Mexico Department of Vocational Education funded a career ladder project entitled Studying and Establishing Generalized Criteria for All Levels of Nursing Education to Facilitate the Career Ladder Concept for Nurses in New Mexico. ... Will you be writing up the proceedings from your "Conference on Career Development and Program Articulation in Health" held in Atlanta in November? If so, could you send me a copy of your program... Do you have ideas and materials related to career mobility that you could share with us?..."

SUMMARY AND CONCLUSIONS

It would appear that the Conference on Career Development and Program Articulation was viewed as a meaningful and worthwhile conference by those persons who participated. It would appear also that the concept of career mobility is gaining acceptance and that faculties are seeking effective models for curriculum innovations. Group reports and responses of individual participants indicate the need for follow-up activities, in which
participants could become directly involved in producing materials (e.g., philosophical statements, guidelines, policies, and/or instructional materials) to assist those who wish to revise curriculums. It is possible that a center for collecting, reproducing, and disseminating instructional materials will be essential to encourage (1) systematic methods for curriculum revision and (2) field-testing, rather than isolated trial-and-error approaches.

On the basis of formal and informal evaluations transmitted to the Conference Director, the following recommendations are hereby offered:

1. That a series of workshops be provided in each of the eight states of Region IV, to permit faculties and relevant persons for each health specialty area to become involved in decision-making related to the curriculum modifications appropriate for that state; and

2. That a center be established for the collection of position papers, research data, and instructional materials related to a sequential curriculum in allied health occupations, and that dissemination of such materials become a major responsibility of the center.

In summary, this conference has revealed the readiness of many faculty members and administrators for revising traditional curriculum patterns in allied health occupations to provide more realistic approaches to manpower and training needs in the health field. It is clear that leadership in this effort is needed, however, lest the hoped-for solution be snuffed out under the pressure of daily tasks and administrative demands.
Announcement of Conference

Participants, Conference on Career Development and Program Articulation
PROGRAM ARTICULATION
IN ALLIED HEALTH OCCUPATIONS

SHERATON-BILTMORE HOTEL
ATLANTA, GEORGIA
NOVEMBER 6-8, 1972
CONDUCTED BY THE
HEALTH OCCUPATIONS EDUCATION PROGRAM

CONDUCTED BY THE
UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
FOR THE
POSTER SESSION

ALLIED HEALTH OCCUPATIONS
IN PROGRAM ARTICULATION
AND CAREER DEVELOPMENT

* * *

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FEDERATION OF ALLIED HEALTH PROFESSIONAL EDUCATIONAL ORGANIZATIONS
ATLANTA, GEORGIA 30312
Please discuss the following questions:

1. What is the current status of health manpower problems in your state or region?
2. What are the major challenges in articulating health programs to provide a sequential curriculum through two or more levels?

A conference designed to focus on these questions will be held in Atlanta. All participants will have the opportunity to discuss and contribute to finding solutions. The conference will be held on October 15th, with a closing session on October 16th.

For more information, please contact:

Dr. Thomas Freeland
Mrs. Lucile Wood
Miss Diane Watson
Mrs. Barbara Killen

All consultants will serve as resource persons for group meetings where health practitioners, educational administrators, and other concerned individuals can discuss and develop strategies for addressing health manpower problems in their respective regions.
Conference on Career Development
and Program Articulation in Health

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Director RTI
University of Alabama
University Station
Birmingham, Alabama

Dr. Carl Witty, Chairman
Division of Allied Health
Calhoun Junior College
600 Gale Lane
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Careers in Health Services
California Department of Education
1003 Wilshire Blvd.
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Associate Director for Nursing
Allied Health Professions Project
University of California, Los Angeles
Los Angeles, California

Florida

Dr. Delmar Miller
Assistant Administrator
Health Occupations Education
Florida Department of Education
Tallahassee, Florida

Georgia

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Athens, Georgia 30601

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Region IV, Department of Health, Education, and Welfare
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Medical College of Georgia
c/o Athens General Hospital
Athens, Georgia 30601

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Instructor, Practical Nursing
Paulding Memorial Hospital
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Dallas, Georgia 30132

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Marietta, Georgia

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Health Occupations Cluster Programs
Rockdale County High School
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Conyers, Georgia 30012

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Division of Postsecondary, Vocational-Technical and Adult Programs
Georgia State Department of Education
333 State Office Bldg.
Atlanta, Georgia 30334

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Marietta, Georgia

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Dalton Vocational School of PN
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Dalton, Georgia 30720

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Assistant Director
Columbus Vo-Tech School
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Columbus, Georgia 31904
Georgia (cont'd)

Dr. Rhodes Haverty, Dean
School of Allied Health Sciences
Georgia State University
Atlanta, Georgia

Dr. Lamar Holloway
Division Chairman, Vocational-
Technical Education
Brunswick Junior College
Brunswick, Georgia

Miss Kay Hopper, R.N.
School Supervisor for LPN Board
Examining Boards Division
166 Pryor Street, S.W.
Atlanta, Georgia 30303

Miss Dana Hudson, R.N.
Board Member
Examining Boards Division
166 Pryor Street, S.W.
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Keith Johnson, Head
Medical Careers Division
Athens Area Vo-Tech School
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Education
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Forest Park Comprehensive
High School
Forest Park, Georgia 30050

Sue Liner
Dalton Vocational School of PN
1221 Elkwood Drive
Dalton, Georgia 30720

John McCormick, Director
Lanier Area Vo-Tech School
P.O. Box 58
Oakwood, Georgia 30566

Dr. Edmund C. Martin
Executive Director
Georgia Educational Improvement
Council, Room 656
7 Hunter Street Bldg.
Atlanta, Georgia 30334

Dr. Mary Elizabeth Milliken
Coordinator, Health Occupations
Teacher Education Program
Division of Vocational Education
University of Georgia 30602

Wilson Morgan
Manpower Advisor
Office of Comprehensive Health
Planning, Georgia Department
of Public Health
1280 West Peachtree Street, N.W.
Atlanta, Georgia 30309

Sara Murray, R.N.
School Supervisor for LPN Board
Examining Boards Division
166 Pryor Street, S.W.
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Columbus Area Vo-Tech School
5628 Sherborne Drive
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Nursing Service
Athens General Hospital
Athens, Georgia 30601

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Chairman
Division of Vocational Education
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University of Georgia
Athens, Georgia 30602
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Instructor
Upson County Area Vo-Tech School
P.O. Box 1089
Thomaston, Georgia 30286

Milbry M. Pass
Instructor, Health Occupations
Coosa Valley Technical School
112 Hemlock Street
Rome, Georgia 30161

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166 Pryor Street, S.W.
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Dalton Vocational School of PN
P.O. Box 1168
1221 Elkwood Drive
Dalton, Georgia 30720

Gayle Scott, R.M.T.
Instructor, Medical Laboratory Assistant Program
Augusta Area Vo-Tech School
1399 Walton Way
Augusta, Georgia

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Practical Nursing Education
Carroll Co. Area Vo-Tech School
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Carrollton, Georgia 30117

J.W. Singleton, Administrator
Athens General Hospital
Athens, Georgia 30601

Nettie M. Slee
Instructor, Practical Nursing
Savannah Area Vo-Tech School
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Savannah, Georgia 31401

Mrs. Jane Snow
Medical Arts Building
Atlanta, Georgia 30308
Kentucky

Dorothy A. McHugh
State Supervisor
Health Occupations Education
21st Floor, Capital Plaza Tower
Frankfort, Kentucky 40601

Barbara Killen, Coordinator
Occupations and Placement Programs
General College
University of Kentucky
Richmond, Kentucky 40475

Dorothy A. McHugh, State Supervisor
Health Occupations Education
21st Floor, Capital Plaza Tower
Frankfort, Kentucky 40601

Marla Hammers, Project Director
Cooperative Nursing Education Project
Department of Nursing
Eastern Kentucky University
Richmond, Kentucky 40475

Mississippi

Ardyce Anderson, R.N.
Instructor, Practical Nursing
Clarksdale Practical Nursg. Program
P.O. Box 1218
Clarksdale, Mississippi 38614

Laura C. Blair, State Supervisor
Health Occupations Education
Mississippi State Department of Education
P.O. Box 771
Jackson, Mississippi 39205

Dr. Clarence Roberts
Dean of Instruction
Meridian Junior College
Meridian, Mississippi 39301

Mrs. Virginia Price, Instructor
Meridian Junior College
Meridian, Mississippi 39301

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Associate Director of Nursing Education
Board of Trustees of Institutions of Higher Learning
P.O. Box 2336
Jackson, Mississippi 39205

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Practical Nurse Education Program
Meridian Junior College
Meridian, Mississippi 39301

Mrs. Virginia Price, Instructor
Meridian Junior College
Meridian, Mississippi 39301

Myrtle M. Estes, R.N., M.S.
Director of Nursing Education
Matty Hersee Hospital
School of Nursing
Meridian, Mississippi

Iris W. Wright
Registrar and Administrative Asst.
Matty Hersee School of Nursing
Meridian, Mississippi 39301

Myrtle M. Estes, R.N., M.S.
Director of Nursing Education
Matty Hersee Hospital
School of Nursing
Meridian, Mississippi

Tom Woods
Education Director of Respiratory Therapy
Hinds Junior College, Jackson
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Jackson, Mississippi 39213

Mrs. Sarah Gueldner, R.N.
Director of Health Occupations
P.O. Box BP
State College, Mississippi
Joseph K. Semak, Valdosta
Allied Health Programs
Cleveland State Community College
P.O. Box 123
Cleveland, Tennessee 37320

P. 1. W. Kuehler, M.D.
Practical Nurse Training
Greenwood County Hospital
Pt. 8, Airport Road
Greenwood, South Carolina 29649
Appendix B

Resumes of Consultants

Program Participants
(Panels, group leaders, etc.)

Evaluation Forms
Monday, Tuesday, Wednesday
Resume  THOMAS F. FREELAND

PRESENT POSITION

Dean, School of Health Related Professions  July 1972 - present
University of Mississippi Medical Center
Jackson, Mississippi

EDUCATION

University of Southern California, Ph.D.  1971

Long Beach State College, M.A.  1965
Major: Education

Lock Haven State College, Lock Haven, Pa., B.S.  1962
Major: Health Education

PROFESSIONAL EXPERIENCE

Dean, School of Health Related Professions  July 1972 - present
University of Mississippi Medical Center
Jackson, Mississippi

Allied Health Professions Project  1969 - 1972
Division of Vocational Education
University of California
Los Angeles, California

Visiting Associate Professor  September 1971 -
University of Southern California  July 1972
Los Angeles, California
('Lecturer in Physiology of Exercise')

Instructor  1968 - 1969
University of Southern California
Los Angeles, California
('Kinesiology - Experimental Studies in Human Performance')

Teaching Assistant  1965 - 1968
University of Southern California
Los Angeles, California

Teacher  1962 - 1964
Elkland High School
Elkland, Pennsylvania
PUBLICATIONS

Report "National Technical Advisory Committee for Electroencephalo-

"A Study of Electroencephalographic Technician Occupations," April
1970.

Report "National Technical Advisory Committee for Respiratory Care,"
May 1970.

"Respiratory Care/Inhalation Therapy," October 1971.


"A Study of the Radiology Technician Occupations, Publication
Pending

A Model of Individualized Instruction for the Clinical Laboratory

A Survey of Practices in Hospital Pharmacies, T. Cullen, December
1971 (Supervisory Responsibility).

Medical Records Terminology/Circulatory System, M. Gosman (Supervisory
Responsibility).

Medical Records Terminology/Digestive System, M. Gosman, (Supervisory
Responsibility).

Nursing, Stage I, Lucille A. Wood (Supervisory Responsibility).

Inhalation Therapy/Respiratory Care Instructional Materials (Editor).

electrocardiographic Technicians Instructional Manual (Co-author)
Resume: MARY BARBARA KILLEN

PRESENT POSITION

Coordinator of Occupational and Placement Programs 1970 - present
General College
University of Minnesota

EDUCATION

U.S. Naval Hospital Corps School San Diego, California 1943

University of Minnesota 1949
B.S. in Agricultural Economics and Homes Economics Education

University of Minnesota 1951
M.S. in General Economics and Marketing

EXPERIENCE

University of Minnesota

Coordinator of Occupational Placement Programs 1970 - present

Faculty, University of Minnesota Independent Study Course for Health Facility Administrators 1969 - present

Faculty, University of Minnesota Public Health, Master's Program in Hospital Administration 1969 - 1970

Coordinator of Educational Referrals for the Minnesota MEDIHC Program 1970 - 1972

American Rehabilitation Foundation 1966 - 1970

Extension Marketing Specialist, University of Minnesota 1965 - 1966

Lecturer, Department of Economics, University of Minnesota 1959

Teacher and Research Assistant 1948 - 1952

Senior Bailie Instructor in Rehabilitation, U.S. Naval Hospital, Philadelphia, Pennsylvania 1944 - 1946

ADVISORY AND CONSULTANT ASSIGNMENTS

Minnesota Hospital Research and Educational Trust

Humanic Designs Corporation

Wisconsin Advisory Council on Vocational Education - Advisory
ADVISORY AND CONSULTANT ASSIGNMENTS (cont'd)

Boards:  
Physical Therapy Assistant  
Occupations Therapy Assistant  
Medical Laboratory Assistant  
Certified Laboratory Assistant  
Bio-Equipment Technician  
Human Services Generalist  
Legal Assistant-Administrator  
Respiratory Technician  

Medical Laboratory Assistant - MEDICA

PUBLICATIONS

Smith, Anita; Killen, M. Barbara; Kovener, R. Introduction to Rehabilitation, 1967.


Killen, M. Barbara, and McNicoll, R. Commonalities in Training Programs for Laboratory Assistant Programs, September 1970.

Killen, M. Barbara, and Davis, Donna A Syllabus and Bibliography on Social Services in Long-Term Health Care Administration, Ames, Iowa. University of Iowa, October 1970.


Resume: DIAN E. WATSON

PRESENT POSITION

Specialist, Health Occupations 1971 - present
Bureau of Industrial Education
Vocational Education Section
California State Department of Education

EDUCATION

California State University 1967
Los Angeles, California
Master of Science in School Psychology

University of California 1952
Los Angeles, California
Bachelor of Arts
Major - Education; Minor - Sociology

Los Angeles City College
Associate Arts Degree

EXPERIENCE

Specialist, Health Occupations 1971 - present
Bureau of Industrial Education
Vocational Education Section
California State Department of Education

Deputy Director, Secondary Schools 1969 - 1971
Allied Health Professions Project

Associate Professor 1969 - 1970
California State University
Los Angeles, California

School Psychologist 1968 - 1969
Los Angeles Board of Education

Assistant Principal 1963 - 1968
Los Angeles Board of Education

Civilian Teacher 1960 - 1963
Department of the Army
Assignments in Okinawa and France

Elementary Teacher 1956 - 1960

CONSULTANT ASSIGNMENTS

Committee on Career Education in the Health Occupations
McGraw-Hill Publishing Company
New York, New York
Resume:  LUCILE A. WOOD

PRESENT POSITION

Allied Health Professions Project
University of California at Los Angeles
Associate Director for Nursing

EDUCATION

University of Tulsa
Bachelor of Science
Major: Nursing

University of California at Los Angeles
Master of Science
Major: Nursing Administration

SPECIALIZED PREPARATION

Operating Room Management and Technique
Michael Reese Hospital
Chicago, Illinois

Public Health Nursing
California Department of Public Health

EXPERIENCE

Allied Health Professions Project
University of California at Los Angeles
Associate Director for Nursing

Director, School of Vocational Nursing
Holy Cross Hospital
Mission Hills, California

Associate Director, Nursing Service
Cedars of Lebanon Hospital
Los Angeles, California

Administrative and supervisory positions in hospitals and medical centers of Oklahoma, West Virginia, Georgia, and Texas

Nursing experience in Emergency Room and Central Supply, Operating Room and Medical Offices
PUBLICATIONS


Conference on Career Development and Program Articulation in Health

Director:

Dr. Mary Elizabeth Milliken
Coordinator, Health Occupations Teacher Education Program
Division of Vocational Education
University of Georgia

Conference Program Participants:

Johnny Browne, Deputy Director
Bureau of Health Manpower Education
Region IV, Department of Health, Education, and Welfare

Deborah Elder, R.N.
Health Occupations Cluster Program
Rockdale County High School

Carolyn Evans, R.N.
Coordinator - teacher, Practical Nurse Education Program
Meridian Junior College

Bonnie Franklin, C.D.A.
President, American Dental Assistants Association

Dr. Thomas L. Freeland
Dean, School of Health Related Professions
University of Mississippi Medical Center

Ray Greeson, State Supervisor
Division of Postsecondary, Vocation-Technical and Adult Programs
Georgia State Department of Education

Dixon Hall, President
James Sprunt Institute
Kenansville, North Carolina

Dr. Rhodes Haverty, Dean
School of Allied Health Sciences
Georgia State University

Keith Johnson, Head
Medical Careers Division
Athens Area Vocational-Technical School

Claire Keane, R.N.
Consultant, Health Occupations Education
Conference Program Participants
and Discussion Leaders

Conference Program Participants: (cont'd)

Barbara Killen
Coordinator of Occupations and Placement Programs
General College
University of Minnesota

Dr. Edmund C. Martin, Executive Director
Georgia Educational Improvement Council

Wilson Morgan
Manpower Advisor
Office of Comprehensive Health Planning

Dr. George L. O'Kelley,
Chairman, Division of Vocational Education
College of Education
University of Georgia

Dr. Delmer Miller, Assistant Administrator
Health Occupations Education
Florida Department of Education

Clarence R. Tunmer, Director
Upson Area Vocational-Technical School

Grace Ward, R.N.
Director, Dalton Vocational School for Health Occupations

Diane E. Watson, Specialist
Careers in Health Services
California Department of Education

Lucile Wood, R.N.
Associate Director for Nursing
Allied Health Professions Projects
University of California, Los Angeles

Discussion Leaders:

Dr. Clarence Roberts
Dean of Instruction
Meridian Junior College

Gayle Scott, R.M.T.
Instructor, Medical Laboratory Assistant Program
Augusta Area Vocational-Technical School

Marcia Stanhope, R.N.
Project Director
Cooperative Nursing Education Project
Eastern Kentucky
Discussion Leaders: (cont'd)

Donna Thigpen, R.N.
Coordinator, Health Occupations Program
James Sprunt Institute
Kenansville, North Carolina
CONFERENCE EVALUATION

Directions: Please circle one numeral to rate each program topic on the continuum provided.

1. AN PSYCHIATRIST-EDUCATOR LOOKS AT EDUCATION PROGRAMS IN RELATION TO PERSONNEL NEEDS IN ALLIED HEALTH OCCUPATIONS

Not relevant to my concerns 1 2 3 4 5 6 7 8 9 Spoke to important concerns in health

2. ALLIED HEALTH PROFESSIONS PROJECT: OVERVIEW OF CURRICULUM DEVELOPMENT PROCESS

Highly significant to my health specialty 1 2 3 4 5 6 7 8 9 I do not see any application to my area of the health field

3. GROUP SESSION: REVIEW OF AHPP OCCUPATIONAL INVENTORIES

Did not provide any "how to" help for me 1 2 3 4 5 6 7 8 9 Could be a useful method for attacking my problems

4. GROUP SESSION: REACTION TO AHPP METHODOLOGY

Helpful; I gained new insight into planning 1 2 3 4 5 6 7 8 9 Provided no clarification or new ideas for me

COMMENTS PRO AND CON:

PLEASE LEAVE THIS SHEET WITH THE DISCUSSION LEADER MONDAY AFTERNOON.

THANK YOU.

SEE YOU TUESDAY MORNING.
CONFERENCE EVALUATION

Directions: Please circle one numeral to rate each program topic on the continuum provided.

5. METHOD AND PROCEDURE FOR JOB GENERATION IN ALDO:ON

Could be very useful 1 2 3 4 5 6 7 8 9 Of little or no use to me

6. HOW TO DEVELOP PERFORMANCE MEASURES

Restated what I already knew 1 2 3 4 5 6 7 8 9 Helped me to see the value of clearly stated outcomes

7. GROUP PRACTICE IN J.O.B. AND SPECIFYING LEARNING OUTCOMES

I could use more help developing these skills 1 2 3 4 5 6 7 8 9 Strictly "old hat" to me

8. CAREERS IN HEALTH SERVICES PROGRAM - SECONDARY LEVEL

Great idea; should help with recruitment 1 2 3 4 5 6 7 8 9 I don't believe health programs should be at the high school level

9. CONSIDERATIONS IN DESIGNING CURRICULUM FOR CAREER DEVELOPMENT

I don't have time for this kind of planning 1 2 3 4 5 6 7 8 9 Makes good sense; a faculty should give it a try before deciding whether or not it will work

10. PANEL DISCUSSION: REACTIONS TO PROGRAM TOPICS

Panelists provided additional ideas; added 1 2 3 4 5 6 7 8 9 Lost on me; added little to the impact of the program

COMMENTS PRO AND CON:

PLEASE LEAVE THIS SHEET WITH THE MONITOR AT THE DOOR AS YOU LEAVE.

THANK YOU.

SEE YOU WEDNESDAY MORNING.
Directions: Please circle one numeral to rate each program topic on the continuum provided.

11. THE CAREER MODEL
An unsatisfactory design for curriculum in my area of the health field

1 2 3 4 5 6 7 8 9
A well-structured educational model; should solve some problems in the health field

12. REPORTS: AFFIRMATIVE ACTION PLANS
Stimulating; glad to hear some new challenges being accepted

1 2 3 4 5 6 8 9
strictly Dullesville; who really believes anything will change?

13. THE CONFERENCE AS A WHOLE
Dealt with concerns of the utmost importance to the health field

1 2 3 4 5 6 7 8 9
Should have been directed to other, more important matters in the health field

14. Presented ideas which should be implemented as soon as possible

1 2 3 4 5 6 7 8 9
Ideas presented are of little practical value in my area of the health field

COMMENTS PRO AND CON:

WHAT SHOULD BE THE MAIN FOCUS OF THE NEXT REGIONAL CONFERENCE, IN YOUR OPINION?

PLEASE LEAVE THIS FORM WITH THE MONITORS AT THE DOOR AS YOU LEAVE.

THANK YOU FOR COMING.

HAVE A SAFE TRIP HOME.
Appendix C

Conference Program, including supportive material provided by keynoters
CONFERENCE ON
CAREER DEVELOPMENT AND
PROGRAM ARTICULATION IN HEALTH

November 6, 7, 8, 1972
Sheraton - Biltmore Hotel
Atlanta, Georgia

Mary Elizabeth Milliken, Ed.D.
Project Director

Health Occupations Teacher Education Program
Division of Vocational Education
College of Education
University of Georgia

for
REGION IV
Bureau of Health Education Manpower
National Institutes of Health
Department of Health, Education, and Welfare
MONDAY, November 6

1:15 - 4:30 p.m.  GROUP SESSIONS  Rooms to be Announced

1:15
Review of AHPP Occupational Areas:
Occupational Dental auxiliary
Inventories: Preparation of Group Report
Medical laboratory Patient care
Respiratory therapy

2:45
Refreshment Break Lower Corridor

3:15
Reactions to States: Alabama,
AHPP Methodology Florida, Georgia,
Preparation of Kentucky, Tennessee,
Group Report Mississippi, North
Carolina, South
Carolina

4:30
Adjourn until 8:30 a.m. Tuesday

PURPOSE OF THIS SESSION:

1. To provide an opportunity for representatives of four occupational areas in health to review the AHPP task inventories and make recommendations; and

2. To provide an opportunity for representatives of several health specialty areas to discuss needs of their states for new or revised approaches to instructional planning.
### TUESDAY, November 7

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:30</td>
<td>GENERAL SESSION</td>
<td>SHERATON A</td>
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<tr>
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<td>Presiding: Keith Johnson</td>
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<td></td>
<td>Announcements</td>
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<td></td>
<td>Method and Procedure for Job Operation Breakdown</td>
<td>Thomas Freeland</td>
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<tr>
<td>9:30</td>
<td>How to Develop Performance Statements</td>
<td>Lucile Wood</td>
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<tr>
<td>10:15</td>
<td>Refreshment Break</td>
<td>Lower Corridor</td>
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<tr>
<td>10:30</td>
<td>GROUP SESSION</td>
<td>Occupational Areas</td>
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<tr>
<td></td>
<td>Practice in Doing a Job Operation Breakdown</td>
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<td></td>
<td>Practice in Specifying Differential Learning</td>
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<td></td>
<td>Outcomes for Entry Level, Assisting, and/or Technical Level Workers</td>
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<tr>
<td>12:00</td>
<td>LUNCH</td>
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**PURPOSE OF THIS SESSION:**

1. To explain and demonstrate the process of analyzing a task (skill/activity) into components, as a basis for instructional planning;

2. To demonstrate the translation of job performance requirements into instructional objectives, in order to develop instructional materials with a high level of validity for job performance requirements; and

3. To provide opportunities for participants to practice doing a task analysis according to J.O.B. procedure and stating performance objectives based on the results of the analysis.
TUESDAY, November 7

1:15 - 4:30 p.m.  GENERAL SESSION  SHERATON A

1:15  Presiding:  Johnny Browne

Careers in Health Services Program at the High School Level

2:15  Considerations in Designing Curriculum for Career Development  AHPP Staff:

Thomas Freeland  Diane Watson  Lucile Wood

3:00  Refreshment Break  Lower Corridor

3:15  Panel Discussion - Moderator:  Clarence Tunmer

Members:

Health Professions Educator  Rhodes Haverty

Comprehensive Health Planner  Wilson Morgan

Nurse-educator-author  Claire Keane

Dental auxiliary educator  Bonnie Franklin

Assistant Administrator, State Department of Education

Administrator - Postsecondary Institution  Delmar Miller  Dixon Hall

Teacher - Coordinator  Grace Ward

Secondary  Deborah Elder  Carolyn Evans

Postsecondary

4:30  Adjourn until 8:30 a.m. Wednesday

PURPOSE OF THIS SESSION:

1. To present information about a high school program which provides opportunities for exploring the health field;

2. To present AHPP experiences in designing curricula for educational programs in the health field; and

3. To provide an opportunity for participants to react to ideas presented from the platform and to consider alternatives for planning educational programs in health.
WEDNESDAY, November 8

8:30 - 12:00 N  GENERAL SESSION
              SHERATON A
                  Presiding:
                  Ray Greeson
            Announcements

8:45     The Career Model              Lucile Wood

10:15    Refreshment Break

10:30    Presiding:
            Reports - Affirmative
            Action Plans
                  States and Occupational
            Groups

11:45 - 12:15    Reaction Panel: Evaluation
                  of Conference

12:15 - 12:30    Summary and Challenge
                  Dr. E.C. Martin, Director
                  Educational Improvement
                  Council

12:30    Adjourn

PURPOSES OF THIS SESSION:

1. To explain the Career Model for nursing, as an example of a curriculum
design which can be developed for other specialty areas within the
health field;

2. To provide an opportunity for those who are planning curriculum changes
as a means of resolving one or more existing problems to present an
overview of intended approaches and receive consultant and participant
feedback.
I. Some Preliminary Concepts

A. The Role of Value Systems
1. producer
2. need
3. needs
4. "handicapped"
B. Social Systems - Relationship of Societal Norms to Health Service
1. "Deviant" behaviors
   a. Different
      (1) retardation
      (2) "gay"
      (3) mentally ill
      (4) physically handicapped
      (5) the dying
      (6) "by passed" population
      (7) poor
   b. Defiant
      (1) draft card burners
      (2) draft file burning
      (3) "offenders" - theft, assault, etc.
C. Economic System Factors (Criteria)
1. Producers - Who Give Health Services
   a. Licensing, certification, registration
   b. Reciprocity
   c. Competence - legal but not ethical, ethical but not legal
2. Distributors in many settings
   a. private dollars
   b. third party payers (public and private)
   c. interesting case
3. Consumers - Who Receive Health Service
   a. the wealthy
   b. the poor
   c. producers
   d. children
   e. the aged
   f. everyone
D. Standards for Service
Assuming we cannot do everything for everyone, shall we emphasize
1. prevention or
2. crisis intervention
Shall we provide services
1. only full scale - what is that?  
   Note: limit to a few
2. based upon need - as determined by whom?
3. based upon supply - access 1 mile or 1,000 miles?
4. based upon expanded supply - utilization
5. based upon "partial" service - triage and referrals
E. Standards for Training

Assessment

1. Academic abilities
2. Exogenous population
3. Self-type indicators
4. Ability to participate
5. NFR!?'

Shall we provide training -

1. Only full scale
2. Based upon need of employers, population
3. Based upon talent (if available: student or faculty)
4. Based upon utilization
5. Based upon partial programs, cooperation and referrals

II. An Allied Health Training Matrix - Some Considerations for Three Stages of Health Training Programs - Planning, Developmental and Operational
(See Attachment No. 1)

III. Career Mobility

A. Some considerations

1. Coordination of Training - how to decide who offers each level
2. Career Development makes educational and economic sense
   a. improvement of career decision making - reality oriented
   b. current educational exposure benefits students
   c. practicing students benefit faculty
   d. may require revisions in programming to accommodate both experienced and inexperienced students - equivalency and proficiency testing
   e. may require part-time arrangements negotiated between employer and educational institution
   f. may require revision of licensing and/or credentialing laws - recognize competency rather than a time interval (e.g. 11 weeks in training)

IV. Salary Comparisons in a Midwestern State - 1972 - for three Human Services Related Areas - Health, Education and Welfare (Unofficial - from various combinations)
(See Attachment No. 2)
## Salary Range - HIM

<table>
<thead>
<tr>
<th>Hospital Administrators</th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>Statewide</td>
<td>$6,000</td>
<td>Up</td>
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<tr>
<td>Metropolitan</td>
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</table>

<table>
<thead>
<tr>
<th>Nursing Service</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>12,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Supervisor</td>
<td>12,500</td>
<td>14,000</td>
</tr>
<tr>
<td>Nurse - 4 year RN</td>
<td>9,012</td>
<td>9,760</td>
</tr>
<tr>
<td>Nurse - 3 year RN</td>
<td>9,652</td>
<td>9,760</td>
</tr>
<tr>
<td>Associate Degree RN (goes to $8,652 after 3 yrs.)</td>
<td>8,752</td>
<td>9,760</td>
</tr>
<tr>
<td>L.P.N.</td>
<td>7,320</td>
<td>9,500</td>
</tr>
<tr>
<td>Ward Secretary/Clerk</td>
<td>6,024</td>
<td>6,256</td>
</tr>
<tr>
<td>Orderlies</td>
<td>5,764</td>
<td>6,036</td>
</tr>
<tr>
<td>Aides (all departments)</td>
<td>5,424</td>
<td>6,076</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Therapists</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief, P.T.</td>
<td>9,000</td>
<td>11,224</td>
</tr>
<tr>
<td>P.T.</td>
<td>6,659</td>
<td>10,455</td>
</tr>
<tr>
<td>P.T.A.</td>
<td>5,700</td>
<td>Up</td>
</tr>
<tr>
<td>Chief, O.T.</td>
<td>2,600</td>
<td>11,550</td>
</tr>
<tr>
<td>O.T. (Less opportunity)</td>
<td>7,970</td>
<td>Up</td>
</tr>
<tr>
<td>C.O.T.A.</td>
<td>6,380</td>
<td>Up</td>
</tr>
<tr>
<td>Inhalation Therapy (O.J.T.)</td>
<td>6,992</td>
<td>6,720</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dietitian</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.S.M.T. - A.S.C.P.</td>
<td>8,760</td>
<td>10,930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.L.A. - C.L.A.</td>
<td>6,420</td>
<td>7,052</td>
</tr>
<tr>
<td>Aid - Dishwasher</td>
<td>5,424</td>
<td>5,676</td>
</tr>
<tr>
<td>Cytotech</td>
<td>8,650</td>
<td>Up</td>
</tr>
<tr>
<td>Histotech</td>
<td>7,600</td>
<td>Up</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Social Worker</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,760</td>
<td>10,980</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recreation for Special Groups (A.A.)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,300</td>
<td>Up</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Recreation Specialist (B.A.)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,760</td>
<td>10,930</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ambulance Driver (only 2 hospitals hire)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,472</td>
<td>10,308</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Secretary</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,009</td>
<td>Up</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Electronics Technician</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,200</td>
<td>Up</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radiologic Technician</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,340</td>
<td>7,400</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bio Communications (M.S. - B.A.)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,000</td>
<td>11,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Med. Photographer</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,000</td>
<td>8,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Orthotics-Prosthetics</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,000</td>
<td>Up</td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td>Hourly Rate</td>
<td>Annual Rate</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Administrators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Commissioner</td>
<td>$14.49</td>
<td>$22,118</td>
</tr>
<tr>
<td>Education Specialist (1 year)</td>
<td>$12.43</td>
<td>$1,245</td>
</tr>
<tr>
<td>Education Specialist (4 years)</td>
<td>$9.20</td>
<td>$9,520</td>
</tr>
<tr>
<td>Vocational Education Program Supervisors</td>
<td>$8.14</td>
<td>$16,872</td>
</tr>
<tr>
<td>Specialists (or M.S + 45-60 credits below doctorate)</td>
<td>$11,742</td>
<td>$19,730</td>
</tr>
<tr>
<td>Principals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>$10,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Junior High</td>
<td>$20,000</td>
<td>Up</td>
</tr>
<tr>
<td>Senior High</td>
<td>$22,637</td>
<td>$25,135</td>
</tr>
<tr>
<td>Elementary and Secondary Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.A. - Statewide</td>
<td>$7,057</td>
<td>$20,344</td>
</tr>
<tr>
<td>B.A. - Metropolitan</td>
<td>$7,579</td>
<td>$11,116</td>
</tr>
<tr>
<td>M.S. - Statewide</td>
<td>$7,866</td>
<td>$11,002</td>
</tr>
<tr>
<td>M.S. - Metropolitan</td>
<td>$8,095</td>
<td>$15,037</td>
</tr>
<tr>
<td>Teacher Aids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Aid I (6 steps)</td>
<td>$3,040</td>
<td>$4,333</td>
</tr>
<tr>
<td>School Aid II (6 steps)</td>
<td>$3,495</td>
<td>$4,622</td>
</tr>
<tr>
<td>School Assistant (about 10 months)</td>
<td>$3,131</td>
<td>$6,666</td>
</tr>
</tbody>
</table>
Administrators
Commissioner, Illinois, Illinois
Assistant Commissioner, Illinois, Illinois
Field Service Supervisor, Welfare I
Field Service and Field Administration
Assistant Director, Director Welfare, Executive II
Welfare Executive I

Social Service Supervision, Inc. Institute (MSW required)
Welfare Field Representative
Social Work Specialist (MSW required)
Sr. Social Worker MSW or BA plus experience
Beginning Social Worker (BA level)
Eligibility Technician
Case Aide
Payment Counselor
### ALLIED HEALTH TRAINING MATRIX

<table>
<thead>
<tr>
<th>PROGRAM INITIATION CRITERIA</th>
<th>PROCESS</th>
<th>SUCCESS CRITERIA</th>
<th>SUPPORTING SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Instructors:</td>
<td>Identify or Design Evaluation Tools:</td>
<td>Community is Involved:</td>
<td>Recruitment, Tenure, Migration, Allocation:</td>
</tr>
<tr>
<td>Mortality</td>
<td>Field Test Content and Methods:</td>
<td>Curriculum Committee Charged:</td>
<td>Utilization &amp; Productivity:</td>
</tr>
<tr>
<td>Unfilled Jobs</td>
<td>Establish &quot;Self Construct&quot; criteria and mechanism:</td>
<td>Coordinator Named:</td>
<td>Quantity &amp; Quality Evaluation:</td>
</tr>
<tr>
<td>Unfilled Needs</td>
<td>Monitor Service Delivery in Clinic Settings:</td>
<td>Initial Faculty Hired:</td>
<td>Economies of Scale:</td>
</tr>
<tr>
<td>Inferred Indicators: Poverty</td>
<td>Modify Coordination Procedures:</td>
<td>Advisory Committee's Functioning:</td>
<td>Compliments &amp; Substitutes:</td>
</tr>
<tr>
<td>Financial Indicators not in Current system:</td>
<td>Presented Modified Content and Materials:</td>
<td>Coordination &amp; Communication:</td>
<td>Forecasting Technological Change:</td>
</tr>
<tr>
<td>Program openings in Next Level</td>
<td>Maintain Evaluation Tools:</td>
<td>Curriculum Designs for Programs:</td>
<td></td>
</tr>
</tbody>
</table>

Successful Criteria

- Communication & Cooperation between Health Training System & Health Delivery Systems and Community (Financial & Leval)
- Indicators Show Improvement

### CONTINUING EDUCATION

- Research & Experience feeds into Planning

M. Barbara Killen
11/72


PUBLICATIONS AND PRESENTATIONS


Killen, M. Barbara, and Davis, Conna, A Syllabus and Bibliography on Social Services in Long-Term Health Care Administration. Syllabus in Nursing Home Administration, University of Iowa (October) 1970.


Killen, M. Barbara, Expanding Role of Professionals in Rehabilitation Disciplines, Proceedings, Association of Schools of Allied Health Professions Annual Meeting, November, 1970 (in press).


Killen, M. Barbara, Faculty, Seminar: for Nursing Home Administrators (ongoing), "Personnel, Spaces and Administration to Provide Adequate Activities." Minnesota Department of Health, Minnesota Department of Welfare.
Philosophy The basic philosophy of the project may be summarized as follows. The aim is to develop instructional material which will enable the student, after a successful period of study, to perform a skill or series of skills. The correct performance of the task/job/activity will enable the student to have sufficient marketable skills for legitimate remunerative employment. The basic strategy for the development of appropriate instructional materials is to use the job as a benchmark for deciding what skills/tasks will be taught. The criterion of acceptable performance is dependent on the standards of the local agency; however, the Allied Health Professions Project has and will continue to suggest minimum performance standards.

Goals

1. To develop modern and effective curricular and instructional materials appropriate for training personnel up to and including the Associate of Arts degree.

2. To provide for continuous updating of these materials, and for their nationwide distribution.

Objectives

1. To develop curricula in health-related fields using modern educational methods.

2. To develop instructional materials on a modular basis.

3. To investigate the concept of core curricula.

4. To develop an Allied Health Occupations career lattice.
5. To provide and distribute, by public or private means, the instructional materials that are developed.

Project Methodology

With the advice and guidance of a National Technical Advisory Committee and utilizing expert consultants as needed, staff will complete for each occupation selected:

1. Identification and listing of all possible tasks within the functional area described.

2. Verification of tasks—a process which might include a survey or field test to determine appropriateness of the task list to the occupational category under consideration.

3. Determination of the processes involved in performance of the task, and determination of the knowledges and skills required for satisfactory accomplishment of each task.


5. Development of curriculum including consideration of the career ladder concept, continuing education, and attainment of degree objectives and transferability of credits earned.

6. Development of innovative instructional materials and instructor manuals in modular form leading eventually to core curricula and exemplary curricula for each occupational category.


10. Distribution of materials.
PROJECTS

TASK INVENTORY

OCCUPATIONAL ANALYSIS

PHASE I: PRE-PLANNING

PHASE II: PLANNING THE MODULE

PHASE III: PROJECTING THE PROTOTYPE MODULE

PHASE IV: FORMATIVE EVALUATION

INSTRUCTIONAL MODULE

PHASE II: REVISION

Step I

Step I

Step I
Step A: AHPP DEVELOPMENTAL SYSTEM

TASK INVENTORY

PERFORM LIBRARY & FIELD RESEARCH

SELECT NATIONAL TECHNICAL ADVISORY COMMITTEE (N.T.A.C.)

GENERATE INITIAL TASK LIST

N.T.A.C. REVIEW OF TASK LIST

PREPARE FINAL TASK LIST
Step B: AHPP DEVELOPMENTAL SYTEM

OCCUPATIONAL ANALYSIS

DEVELOP QUESTIONNAIRE

DISTRIBUTE QUESTIONNAIRES TO SELECTED SAMPLE

ANALYZE DATA

MAINTAIN LIBRARY & FIELD RESEARCH

PRODUCE FIRST DRAFT OF OCCUPATIONAL ANALYSIS REPORT

CONSULT N.T.A.C.

PREPARE FINAL DRAFT OF OCCUPATIONAL ANALYSIS REPORT
Step C: AHPP DEVELOPMENTAL SYSTEM

PERFORMANCE CRITERIA
- EMERGENT SKILL?
FEW PERFORMING TASK,
MANY WILL BE REQUIRED
TO PERFORM TASK
- ESTABLISHED SKILL?
MANY PERFORMING TASK
+ MANY ENTERING
PROFESSION

LITERATURE
RESEARCH

FIELD RESEARCH
- INTERVIEWS
- OBSERVATION

ON EFFECTIVENESS CRITERIA
- FEW PERFORMING TASK WELL
MANY PERFORMING TASK

IS THERE A TRAINING NEED?

RESEARCH OF MANPOWER
PROJECTIONS

LITERALITY
IS THE SKILL HIGH ON
CRITICALITY AS ESTABLISHED
BY NATC?

CONTENT
PROCEDURAL
THEORETICAL
VISUAL, TACTUAL
AND MOTOR
DISCRIMINATIONS

IS SKILL SUITED FOR:
MODIFIED
INSTRUCTION

ADMINISTRATION
HOW MUCH INSTRUCTOR
INTERFACE REQUIRED?
EXTENT OF POSSIBILITY
FOR SELF-EVALUATIVE
PERFORMANCE CHECKS?
SUBSTANTIAL SAVINGS IN
CONVENTIONAL INSTRUCTOR
TIME?
POSSIBILITY OF SUBSTANTIAL
IMPROVEMENT IN STUDENT
PERFORMANCE

PHASE I. PRE-PLANNING
Step D: AHPP DEVELOPMENTAL SYSTEM

**SETTING LIMITS**
- CHECK FOR MATCH/MISMATCH
  - DEFINE PRE-REQUISITE BEHAVIORS AND CHARACTERISTICS OF STUDENT POPULATION
  - DEVELOP PRE-REQUISITE TEST (OPTIONAL)
  - DEFINE TERMINAL BEHAVIORS WITH STATED ACCEPTABLE CRITERIA
  - DEVELOP PERFORMANCE TEST
  - CHECK FOR MATCH/MISMATCH

**DEFINE TERMINAL LIMITS**
- LOWER LIMITS SET?
- UPPER LIMITS SET?

**SELECTING MEDIA**
- DEFINE PRESENTATION MODES NEEDED
- MATCH MODES TO MEDIA
- IS COST PROHIBITIVE?
  - YES
    - DEFINE RESPONSE MODES NEEDED
    - MATCH MODES TO MEDIA
  - NO

**DEFINING LEARNING ENVIRONMENT**
- DEFINE SUPERVISORY CHARACTERISTICS
- IDENTIFY SPACE REQUIREMENTS PER STUDENT
- IDENTIFY EQUIPMENT REQUIREMENTS PER STUDENT

**PHASE II: PLANNING THE MODULE**
Step E: AHPP DEVELOPMENTAL SYSTEM

**MODULE**

- DEVELOP STEP-BY-STEP OUTLINE
- COMMISSION ARTWORK
- COMMISSION PHOTOGRAPHY
- ARRANGE TYPING
- CHECKED BY OUTSIDE EXPERT
- INSPECTED APPROVED
- ASSEMBLE MODULE

**CONTROL SYSTEM**

- WRITE INSTRUCTIONS TO STUDENT
- DEVELOP INTRODUCTION TO MODULE
- LIST TECHNICAL VOCABULARY
- DEVELOP BIBLIOGRAPHY
- DEVISE ENRICHMENT MATERIAL

**PHASE III: PRODUCING THE PROTOTYPE MODULE**
Step I: AHPP DEVELOPMENTAL SYSTEM

**GROUP EVALUATION**

1. Find group of subjects representative of student pop.
2. Find equipment, space & instructors representative of that required.
3. Present module to instructors.
4. (Instructors present module to subjects)
5. Interview subjects on completion of testing.
6. Analyze test results.
7. Did students pass test satisfactorily?
   - Yes
   - No

**DEVELOPMENTAL EVALUATION**

1. Find subject representative of the student population.
2. Find equipment and space representative of that required.
3. Present module to subject.
4. Observe subject's interaction with module.
5. Can subject progress through material substantially unaided?
   - Yes
   - No
7. Can subject pass test?
   - Yes
   - No

**PHASE IV: FORMATIVE EVALUATION**
Step G: AHPP DEVELOPMENTAL SYSTEM

**REVISION**

REVISE MODULE ON BASIS OF EVALUATION FEEDBACK

- COMMISSION FINAL ARTWORK
- COMMISSION FINAL PHOTOGRAPHY
- COMMISSION FINAL TYPING

INSPECTED & APPROVED

ASSEMBLE FINISHED VERSION

PHASE V: REVISION
Step H: AHPP DEVELOPMENTAL SYSTEM

PRODUCT

MAKE COPYRIGHT DECISIONS

APPLY FOR COPYRIGHT

SUBMIT FOR PRINTING BY UNIVERSITY PRINTING OFFICE

SUBMIT RFP

NEGOTIATE CONTRACTS

SELL AT COST
Objective: At the end of this session you will be able correctly to prepare at least one job breakdown of a skill you select in your area of interest, e.g., clinical laboratory, etc.

1. Specify the skill (activity or task) to be learned.

2. Subdivide the skill into major steps to be learned.

3. Support the practical content with related theory which will clarify the major steps, e.g., factors which make or break the successful attainment of the skill; safety precautions; points for making the step easier to do (special timing, special handling or positioning, special sequence of action); related biological concepts or principles of microbiology, where applicable and human relations skills needed for successful completion of the activity; pertinent ethical or legal concepts.
GROUP ACTIVITY: PRACTICE IN J.O.B.

STATEMENT OF THE TASK: 

2. OBJECT COMPONENT
4. ACTION COMPONENT
6. INFORMATION COMPONENT

3. Can the objects required to do the task be identified from the task statement? YES - Go to action component; NO - Rewrite the task statement.

5. Is there agreement between the writer and an "expert" on what the performer will do, according to what the task statement says? YES - Go to information component; NO - Rewrite the task statement.

7. Classify each item listed in the information column as follows:

   Directly related information     ++++
   Indirectly related information   +++
   Generally related information    ++
   Unrelated information            +

8. Participate in a group discussion on the implications of these classifications for instructional planning.
# U.C.L.A. DIVISION OF VOCATIONAL EDUCATION
## CLINICAL INSTRUCTOR TRAINING PROGRAM
### JOB BREAK-DOWN SHEET

**Instructor:**

**Trainee:**

**Job:** Handwashing

## IMPORTANT STEPS IN THE OPERATION:

A logical segment of the operation when something happens to ADVANCE the work

## KEY POINTS:

Anything in a step that might Make or break the job

Injure the worker

Make the work easier, i.e., "knack," "trick," special timing, bit of special information

<table>
<thead>
<tr>
<th>Step</th>
<th>IMPORTANT STEPS IN THE OPERATION</th>
<th>KEY POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Approach sink</td>
<td>Stand comfortably, in good body alignment Stand away from sink Avoid wetting uniform with water</td>
</tr>
<tr>
<td>2.</td>
<td>Turn on water</td>
<td>Water runs continuously throughout procedure Hand operated, foot pedal, elbow lever</td>
</tr>
<tr>
<td>3.</td>
<td>Adjust water temperature</td>
<td>Warm water--better suds, removes fewer skin oils Very hot or cold water--dry skin</td>
</tr>
<tr>
<td>4.</td>
<td>Wet hands with water</td>
<td>Hands downward Avoid touching sides of sink Water drains from wrist to fingertips</td>
</tr>
<tr>
<td>5.</td>
<td>Apply soap (detergent)</td>
<td>2-4cc liquid soap Bar soap-harbors germs, must rinse off if used before replacing in soap dish</td>
</tr>
<tr>
<td>6.</td>
<td>Wash hands</td>
<td>Use friction, rotary action 30 seconds (strokes) Wash palm-10 sec, back of hand 10 sec, interdigital spaces 10 sec</td>
</tr>
<tr>
<td>7.</td>
<td>Rinse</td>
<td>Water must flow from wrist to fingertips</td>
</tr>
<tr>
<td>8.</td>
<td>Moisten wrists and forearms</td>
<td>About 4cc liquid soap Wash first one wrist and forearm, then the other 15 sec. each</td>
</tr>
<tr>
<td>9.</td>
<td>Rinse arms and hands</td>
<td>Water drains off fingertips</td>
</tr>
<tr>
<td>10.</td>
<td>Repeat handwashing</td>
<td>Steps 5 through '9</td>
</tr>
<tr>
<td>11.</td>
<td>Inspect knuckles</td>
<td>Excess dirt and germs collect on knuckles</td>
</tr>
<tr>
<td>12.</td>
<td>Clean fingernails</td>
<td>Clean at beginning of tour and PRN Use orange stick, file, etc. Discard after cleansing</td>
</tr>
</tbody>
</table>
SEPARATING CLINICAL SPECIMENS
U.C.L.A. DIVISION OF VOCATIONAL EDUCATION
CLINICAL INSTRUCTOR TRAINING PROGRAM
JOB BREAK-DOWN SHEET

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Trainee:</th>
<th>Job:</th>
</tr>
</thead>
</table>

**IMPORTANT STEPS IN THE OPERATION:**
A logical segment of the operation when something happens to ADVANCE the work

| KEY POINTS: Anything in a step that might |
| Make or break the job |
| Injure the worker |
| Make the work easier, i.e., "knack," "trick," special timing, bit of special information |

**CHECKING THE CENTRIFUGE**

1. Open the centrifuge cover

2. Remove any tubes that are in the centrifuge cups or shields.

3. Check that opposite each cup in the rotating head there is another of equal weight

4. Remove two opposing cups from the centrifuge head

5. Examine each for debris such as broken glass

6. If a cup is not clean, invert and tap against a hard surface.

7. Remove the rubber cushion from the bottom of each cup

8. If the cushion is in good condition, put it back; if it is brittle or cracked, replace with a new one

9. Place the cups on a surface near the centrifuge.
OBJECTIVE FORMULATION:

OVERVIEW

Before launching any educational project, whether it be development of instructional material or classroom teaching, it is imperative that the objectives be stated in measurable terms. These measurable objectives will help:

1. Determine the various courses of action that are to be taken in order to attain the objectives.

2. Ask the project designers to identify what conditions are necessary to attain the stated objectives.

3. Evaluate the outcomes.

This booklet is designed so that when you complete it you will be able to:

1. Discriminate between measurable objectives and non-measurable objectives.

2. Transform the non-measurable objectives into measurable ones.

3. Analyze objectives into components and identify the components that are obligatory and/or optional.

4. Formulate measurable objectives for given subject matter.

The purpose of this booklet, therefore, is to impart the skill of objective formulation. The various exercises are designed for the purpose of internalization. Work with these actively and learning will take place. This programmed unit is adapted from Curriculum Development: A Process by S.K. Machiraju, C.H. Frischmuth, and Claudia Powers, copyright 1972, Educational Technology Conference, New York, 1972, and is used with the authors' permission.
WHAT IS A PERFORMANCE OBJECTIVE?

An objective is a measurable form of statement with one or more of the following explicitly discernible components:

A. **Action**: This is the form of action that must be carried out to satisfy the operation of the/a project.  
   (Example: Shall be able to identify parts of the digestive .

B. **Conditions given**: The materials and personnel that are needed regarding the action specified.  
   (Example: Given a model of the human body.)

C. **Minimum acceptable performance**: This is stated in terms of the time duration or accuracy desired in the results of the contemplated action.  
   (Example: Wash hands properly in 2 minutes.)

The following table shows the combinations of the components that are admissible as objectives and the combinations that are not admissible as performance objectives.

### COMBINATIONS OF COMPONENTS OF PERFORMANCE OBJECTIVES

<table>
<thead>
<tr>
<th>ACTION</th>
<th>CONDITIONS GIVEN</th>
<th>MINIMUM ACCEPTABLE PERFORMANCE</th>
<th>IS AN OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>X</td>
<td>X</td>
<td>O</td>
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<td>X</td>
<td>O</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The "X" mark indicates the presence of the component.  
The "O" mark indicates the absence of the component.
The trainee will be able to compute the state sales tax on a specific amount of money.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>CONDITIONS TO BE GIVEN</th>
<th>MINIMUM ACTUAL PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

The member of the target group shall be able to state conditions under which the Salmonella organisms are harbored.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>CONDITIONS TO BE GIVEN</th>
<th>MINIMUM ACTUAL PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Following example gives an objective and a breakdown of its components. Analyze the components of objectives given in the exercises. This will facilitate in identifying components of objectives.

Example: Given the amount of "taper per foot," the trainee must compute with no error the taper per inch. (Take 1/12 of the "taper per foot" value.)

<table>
<thead>
<tr>
<th>ACTION</th>
<th>CONDITIONS TO BE GIVEN</th>
<th>MINIMUM ACTUAL PERFORMANCE</th>
</tr>
</thead>
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</tbody>
</table>
Classify by placing a check mark in the appropriate column.

**LIST OF ACTION WORDS** | **MEASURABLE**
---|---
To enrich | 
To define | 
To understand | 
To reduce | 
To state | 
To know | 
To recite | 
To believe | 
To enjoy | 
To appreciate | 
To identify | 
To educate | 

It can be said that for developing a measurable objective, only measurable action words should be used. A non-measurable action word makes the objective non-measurable.

Can an objective such as "to know the facts about venereal disease" be considered as a measurable objective? Yes/No

Can an objective such as "to educate the members of the target group about venereal diseases" be considered as a measurable objective? Yes/No

Can an objective such as "to enable the members of the target group to identify symptoms of syphilis" be considered as a measurable objective? Yes/No

Answers: No, No, Yes
One of the objectives of this booklet is to help you determine measurable objectives and non-measurable objectives. An objective must have measurable actions. A chart for identifying measurable actions is given below. There is a list of actions (including measurable as well as non-measurable) given on the next page. You are required to classify these actions into measurable and non-measurable on the basis of the Chart.

**Chart for Identifying Measurable Action Words**

1. **Student Action Word**
2. When given the action word, are different students likely to come up with the same end product?
   - **Yes**: Is an appropriate word.
   - **No**: This word would need another instrument (e.g., interview) to bring about a reproducible end product.

Prepare it down into action words that are reproducible.
THE TOTAL CURRICULUM
1. Chico Unified, Chico, California
   (3 local high schools)
2. Clovis Unified, Clovis, California
3. Coachella Valley Joint Union
   Coachella, California
4. Corona-Norco Unified, Corona, California
5. Fresno City Unified, Fresno, California
6. Grossmont Union High School District
   La Mesa, California
7. Imperial Valley Unified, El Centro, California
8. Jefferson Union, Daly City, California
9. Kern Joint Union, Bakersfield, California
10. Long Beach Unified, Long Beach, California
11. Los Angeles Unified, Los Angeles, California
12. New Haven Unified, Union City, California
13. Rialto Unified, Rialto, California
14. San Mateo Union, San Mateo, California
Considerations in Designing Curriculum for Career Development: Basic Sciences

GIVEN, that the

1. Career ladder illustrates -
   - Entry level jobs require many skills and some knowledge;
   - Higher level jobs require additional knowledge, but few additional skills beyond those of lower level jobs;

2. Job Operation Breakdown (J.O.B.) shows that related knowledge (direct and indirect) is needed, but little general knowledge (nice to know) is required;

AND

3. The traditional basic science courses are subject-centered: anatomy, physiology, biology for science majors AND non-science majors, with little or no consideration for different student goals.

THEN,

1. How might a course be set up for health programs?
   - Other college catalogs
   - Ask practitioner
   - Judgment of related faculty

2. What is an alternate method?
   - Task analysis approach
     a. List tasks
     b. Describe skills and knowledge
     c. Draw out basic science concepts

What are the implications of this method for Allied Health curriculum design?
Objective: You will be able to discuss advantages/disadvantages of core curriculum, career sequence (ladder/lattice) and integration of basic science content versus basic science core with the program panel.

Core Curriculum

"Core has many meanings, including (1) that part of the curriculum which is concerned with the types of experiences thought to be essential for the development of specific behavior competencies considered necessary for effective action; (2) a number of logically organized subjects or fields of knowledge which may be interrelated; (3) common problems or units of work; and (4) ideas providing a design or structure for studying a particular subject.

The concept of core curriculum was first expressed about 35 years ago. The specific advantages of core curriculum are thought to include: (1) enhancing teaching efficiency and economy by structuring a foundation of courses which can be applied to a wide spectrum of careers; (2) providing uncommitted students with an educational experience which will assist in their choice of career and be applicable to that career; (3) allowing the student to synthesize and correlate learning experiences; (4) permitting greater program flexibility and adaptability; and (5) providing for greater interaction among allied health students.

Because of the numerous definitions and purposes of core curriculum, because the allied health occupations encompass a broad spectrum of knowledges and tasks, and because the project staff believes that "core" should be based on the performance of common tasks, the various levels of core have been defined by AHPP. Using the performance of a specific task as a basis, the following categories are delineated:

1. Tasks which are performed by all levels and types of allied health workers. These tasks form an allied health core, e.g., Handwashing for Medical Asepsis.

2. Tasks which are performed by all levels of personnel within a specific occupational field. These tasks comprise a core which is specific to an occupational field, e.g., bedmaking.

3. Tasks which are performed by a specific category of personnel within a specific occupational field, i.e., dependent on position title or certification. These tasks comprise a core which is specific to one level of personnel within an occupational category, e.g., RN -- give IV medication.

4. Tasks which are thought to be job-specific, that is, the performance of these tasks is related to the environment in which the task is performed; therefore, it may be unique to a specific worker, e.g., Group Therapy Counseling -- for Psychiatric RNs.

The Allied Health Professions Project is developing core curricula based on the performance of common tasks as delineated in the above categories.
### AHPP Definitions of Terms

<table>
<thead>
<tr>
<th>Behavioral Objective:</th>
<th>The capabilities which the student should acquire as a result of the learning experience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Lattice:</td>
<td>Provision of opportunity for the entry-level individual and/or trained worker to continue his education to a more advanced level in an occupational field.</td>
</tr>
<tr>
<td>Curriculum:</td>
<td>The sum total of learning experiences for which the school has responsibility.</td>
</tr>
<tr>
<td>Course:</td>
<td>One or more related units of instruction.</td>
</tr>
<tr>
<td>Instructional Unit:</td>
<td>Instructional materials which consist of one or more related modules.</td>
</tr>
<tr>
<td>Module:</td>
<td>A self-contained instructional segment.</td>
</tr>
<tr>
<td>Entry-Stage:</td>
<td>The point at which a novice student undergoes preparation for gainful employment at the first career stage which provides a foundation for advancement in an occupation.</td>
</tr>
<tr>
<td>General Knowledge:</td>
<td>Information that develops &quot;pride in the profession&quot; and other professional values.</td>
</tr>
<tr>
<td>Job Operation Breakdown:</td>
<td>A study to determine the steps a worker must do and the key points of knowledge he must know in order to perform a given task.</td>
</tr>
<tr>
<td>Key Point:</td>
<td>Knowledge which is required to perform a step. A key point may be one of three types: (1) anything that assures success or causes failure; (2) physical dangers; (3) any &quot;trick&quot; which may make the work easier.</td>
</tr>
<tr>
<td>Learning:</td>
<td>That which occurs when a person changes his own behavior. Behavioral changes may be the acquiring or discarding of skills, knowledges, and/or attitudes.</td>
</tr>
<tr>
<td>Occupational Analysis:</td>
<td>A study to determine the tasks currently being performed by workers in a given occupational area.</td>
</tr>
<tr>
<td>Programmed Learning:</td>
<td>A series of sequential learning experiences which results in a change in behavior.</td>
</tr>
<tr>
<td>Stage:</td>
<td>A major element of an occupational curriculum which permits, at completion, full employment as a practitioner with demonstrable performance capabilities (skills, knowledge), i.e., Nursing Occupation, Stage II - Basic Nurse Practitioner.</td>
</tr>
</tbody>
</table>
Step: A logical segment of a task, when something happens to advance the work.

Task: A series of steps that make up a complete unit of work.

Teaching: Assisting learners to change their own behavior, and creating conditions which are conducive to behavioral changes.
Unit 13: Urine Elimination
(Modules 1 through 15)

1. Assisting the Patient to Use the Bedpan
2. Assisting the Patient to Use the Female Urinal
3. Assisting the Patient to Use the Fracture Pan
4. Assisting the Patient to Use the Male Urinal
5. Assisting the Patient to the Bathroom
6. Routine Urine Specimen Collection
INTRODUCTION TO THE CLINICAL LABORATORY

1. Filling the Capillary Tube
2. Sealing the Capillary Tube
3. Centrifuging the Capillary Specimen
4. Calculating the Hematocrit Determination

THE HEMATOCRIT
1) Filling the Capillary Tube
2) Sealing the Capillary Tube
3) Centrifuging the Capillary Specimen
4) Calculating the Hematocrit Determination
APPENDICES

A. Sample pages of instructional units

1. Dental
2. Clinical Laboratory
3. Medical Records/Circulatory System
4. Medical Records/Digestive System

B. Sample pages of performance checklist

1. Nursing: Handwashing Technique for Medical Asepsis
2. Clinical Laboratory: Collection of Clinical Specimens - Preparation of Blood Smears
3. Inhalation Therapy: Operation of Bubble Humidifier
4. Electrocardiography: Run an ECG - Application of Electrodes and Leads (2-c)

C. Sample JOB

1. Nursing: Handwashing
2. Clinical Laboratory: Separating Clinical Specimens - Checking the Centrifuge.

D. Organization of Instructional Material from Module Curriculum

1. Nursing
2. Clinical Laboratory
MANDIBULAR RIGHT POSTERIOR TEETH (#32-#28)

BUCCAL ASPECT

1. You should be positioned at the side of the patient. His mouth should be level with or lower than your elbow. The headrest and backrest should be positioned so the patient's neck and spine are in a straight line.

2. Tell the patient to turn his head slightly away from you. This position allows maximum direct vision. Instructions to the patient should always be polite verbal commands. Do not turn the patient's head with your hands because this would break the chain of asepsis and you would have to rewash your hands.

3. Pick up the mirror with your left hand. Insert the mirror head so that it is parallel to the occlusal plane. Then move it laterally to the buccal mucosa.
this label on a Papanicolaou jar. Fill out the appropriate Pathology Lab slip.

6. Carefully remove the tubes at the end of the 10-minute period by twisting them out of the centrifuge container. Discard the supernatant by pouring it into the sink.

7. With the tube held in a horizontal position, carefully tease out the sediment, using the special cytology spatula (Fig. 2). Smear material thinly onto the slide previously prepared with the egg albumin (Fig. 3). Prepare one or two slides for the sediment samples from each of the centrifuge tubes.

8. As each slide is prepared, put it into the Papanicolaou jar containing a fixative (see Appendix).

9. Take the Papanicolaou jar to the Pathology Laboratory with the laboratory slips.

F. General Comments

1. A variety of modifications are available in the preparation of gastric material for cytology. There is little agreement on which method is superior to another. The essential factors that determine success are:

   a. thoroughness of the barbotage
   b. maintenance of the cold environment
   c. the rapidity of processing, from immersion of the slide in the fixative...
Food must undergo certain radical changes before the body can make use of it. The gourmet dinner eaten in an elegant restaurant shares the same fate as the snack in front of the TV. Nature has equipped man's body with a digestive system that requires little assistance from his conscious mind. The moment the food is swallowed, the automatic process begins. The digestive system, like an automated factory, starts by ordering and feeding the supplies to the machine, which automatically performs all the necessary steps to the point of disposing of the output.

Figure 1 shows the continuous passageway extending throughout the body. It is made up of several sections starting with the mouth (1) into which food is taken, proceeding to the pharynx (2), then to the esophagus (3), the stomach (4), the small intestine (5), and the large intestine (6), terminating at the anus (7) where the solid wastes are expelled. The total passageway has several names: the alimentary canal, the digestive tract, and the gastrointestinal tract (abbreviated as GI tract). "Gaster," or "gastero," a Greek word meaning stomach; "aliment," a Latin word meaning food; and "enteron," a Greek word meaning intestine, are the origins of some of the words used to describe the digestive system. Gastroenterology is the study of the digestive system.

The digestive system has two important functions. The first is the digestive process, which converts food to a state capable of being taken into cells by way of the blood and lymph channels. This process is both mechanical and chemical. The mechanical process moves the food along the tract and breaks it into fine particles. The intestinal glands produce enzymes that attack the food and break it down into smaller particles; this is the chemical part of the process. The second important function is the absorption which transfers the digested food from the intestinal tract into the blood stream.

A group of organs, the liver (8), the gallbladder (9) and the pancreas (10), are vitally involved and necessary for the digestive process, although they are not a part of the alimentary canal.
A. Identify the parts of the digestive system in Figure 1.

1. ___________ 6. ___________
2. ___________ 7. ___________
3. ___________ 8. ___________
4. ___________ 9. ___________
5. ___________ 10. ___________

B. Fill in the blanks with the correct answer.

1. What part of the word gastroenterology means stomach? ___________
2. Alimentary is derived from the word _____, meaning food.
3. The two chief functions of the digestive system are _____ and _____.
4. The digestive function includes a _______ process and a _______ process.
5. The ______, _______, and ______ are not a part of the alimentary canal but are essential for the digestive process.
6. Enteron means ___________.
7. Combine the words gaster and enteron to make a word which means a study of the digestive system. ___________

C. If a child were to swallow a penny, name the route in the gastrointestinal tract it would travel before it is expelled.

1. ___________
2. ___________
3. ___________
4. ___________
5. ___________
6. ___________
7. ___________

For answers see Page 48
THE HEART

1. Sections of the Heart

The terminology to be learned in this section is particularly significant because the words will occur over and over again in your medical transcription. Every medical specialty includes information regarding the circulatory system in examination and diagnosis. The causes of death in this country list cardiovascular disease as number one (over 50 percent); all other causes comprise less than 50 percent. For the thousands of people who receive proper medical care there is great hope of survival, whereas twenty years ago many of the heart and blood vessel disorders were considered hopeless.

You have just read two important words that form the basis for this section:

Cardio = heart
Vascular = blood vessel

Your heart is a powerful, long-working, hard-working pump which is the most intricately woven muscle in the body. Its main function is to pump blood to the lungs and to all the body tissues. It pumps an average of five quarts of blood in a minute so that by the time one reaches the age of seventy, his heart will have pumped 18 million barrels. This busy organ works twenty-four hours a day.

Let us look at the design of this remarkable and vital structure. (See Figure A.)*

The heart, weighing well under a pound, is a hollow organ. The wall of the organ is a tough muscle called the myocardium (1). The cover that surrounds it like a fibrous bag is the pericardium (2). The lining is a thin, strong membrane, the endocardium (3). The wall which divides the heart cavity down the middle into the right side and left side is the interventricular s_e_a_m (4). Each side of the heart is divided again into an upper chamber, right atrium or auricle (5) and left atrium or auricle (6), as well as a lower chamber, the right ventricle (7) and the left ventricle (8). Thus, there are four chambers. The blood which moves through them is regulated by a system of valves.

*View all figures as though you were standing behind them and viewing them on yourself.
A. Write the medical terms for the numbers in the figure next to the definitions.

1. ____________________________ Muscular wall of the heart
2. ____________________________ Outer surface of heart
3. ____________________________ Inner surface of heart
4. ____________________________ Wall dividing right from left side of heart
5. ____________________________ Upper right heart chamber
6. ____________________________ Upper left heart chamber
7. ____________________________ Lower right heart chamber
8. ____________________________ Lower left heart chamber

B. Write the word or word part in front of its meaning:

<table>
<thead>
<tr>
<th>Inter</th>
<th>Septum</th>
<th>Cardio</th>
<th>Atrial</th>
<th>Peri</th>
<th>Endo</th>
<th>Myo</th>
<th>Ventricle</th>
<th>Ventricular</th>
<th>Vascular</th>
</tr>
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</tbody>
</table>

1. ____________________________ pertaining to upper chamber of heart
2. ____________________________ part of a word meaning heart
3. ____________________________ part of a word meaning outer covering
4. ____________________________ part of a word meaning an inner lining
5. ____________________________ pertaining to a lower heart chamber
6. ____________________________ pertaining to a blood vessel
7. ____________________________ a wall
8. ____________________________ part of a word meaning muscle
9. ____________________________ part of a word meaning between
10. ____________________________ a lower heart chamber

For answers see Page 60
PERFORMANCE CHECKLIST

Unit: Handwashing Technique for Medical Asepsis

Student: ____________________________________________

Instructor: ____________________________________________

Date: ________________________

1. Stood away from sink so as not to have clothing in contact with sink.

2. Turned water on; adjusted to warm temperature. Kept water running during entire procedure.

3. Wet hands.

4. Applied soap thoroughly; got under nails and between fingers.

5. Washed palms and backs of hands with strong frictional motion (10 rotary movements for at least 20 seconds).

6. Washed fingers and the spaces between them, interlacing the fingers, rubbing them up and down for 10 seconds (10 strokes).

7. Washed wrists and above wrists three or four inches, using rotary action (10-15 times).

8. Repeated steps 4 through 7 (completion of 2-minute scrub, 120 strokes).

9. Paid special attention to problem areas.

10. Rinsed well; ran water from wrists to fingers (final rinse).

11. Dried thoroughly with paper towel from wrists to fingertips.

12. Turned off water with paper towel and discarded in receptacle.

13. Used hand-lotion if desired.

* PASS ________ FAIL ________

AHPP 10/71

* Must have 100% satisfactory performance
**PERFORMANCE CHECKLIST**

Unit: Collection of Clinical Specimens

Student:

School or Facility:

Date:

<table>
<thead>
<tr>
<th>SATISFACTORY</th>
<th>UNSATISFACTORY</th>
<th>NOT APPLICABLE</th>
</tr>
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<tbody>
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</table>

**PREPARATION OF THIN BLOOD SMEAR**

1. Placed a drop of blood on a clean glass slide.
2. Held a second slide at $30^\circ$ to $45^\circ$ angle.
3. Moved second slide back toward drop of blood.
4. Allowed capillary action to spread drop along edge.
5. Moved slide rapidly.
7. Air dried.
8. Evaluation of the thin smear by the supervisor.

**PREPARATION OF A THICK BLOOD SMEAR**

1. Placed a drop of blood on a clean glass slide.
2. Held a second slide at $65^\circ$ to $80^\circ$ angle.
3. Moved second slide back toward drop of blood.
4. Allowed capillary action to spread drop along edge.
5. Moved slide rapidly.
7. Air dried.
8. Evaluation of the thick smear by the supervisor.

Instructor: ___________________________ Performance Check Time: ___________________________

Comments: __________________________________________

---

Trial No. 1: *Pass_____ Unsatisfactory_____

Trial No. 2: *Pass_____ Unsatisfactory_____

* Must have 100% satisfactory performance
**PERFORMANCE CHECKLIST**

Unit: **COURSE IV, ITEM 1: Operation of Bubble Humidifier**

<table>
<thead>
<tr>
<th></th>
<th>SATISFACTORY</th>
<th>UNSATISFACTORY</th>
<th>NOT APPLICABLE</th>
<th>NOT OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<td></td>
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<tr>
<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<tr>
<td>5.</td>
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<tr>
<td>6.</td>
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</table>

**Student:**

**School or Facility:**

**Date:**

1. Washed hands
2. Collected the proper components (jar, lid, gasket, diffuser, flowmeter)
3. Checked the condition of components (cracks, leaks, openings)
4. Assembled equipment (diffuser, lid, flowmeter)
5. Checked the unit for operation (leaks at 8 LPM—relief valve)
6. Packaged equipment for storage

**Instructor:**

**Performance Check Time:**

**Comments:**

---

**Trial No. 1:** Pass Unsatisfactory

**Trial No. 2:** Pass Unsatisfactory

* Must have 100% satisfactory performance
PERFORMANCE CHECKLIST

Unit: **III: Run an ECG - Application of electrodes and leads (2-c)**

<table>
<thead>
<tr>
<th></th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Not Applicable</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Collected all the materials that were needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Exposed the patient's arms and legs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Applied the electrode conductor material to the area and rubbed it until the skin became slightly reddened.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Placed the electrode over the electrode paste and reddened area.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Fastened the rubber strap to the electrode and wrapped it snugly around the limb.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Attached the two limb electrodes on one side of the body, then went to the other side to attach the limb electrodes there.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Unrolled the patient cable and placed it on the bed and on the patient's abdomen.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Attached the proper lead tip to the correct limb electrodes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Attached the chest lead to the chest electrode, but did not expose the chest at this time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Connected the patient cable to the electrocardiograph.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Instructor: ___________________________ Performance Check Time: ___________________________

Comments: ___________________________

---

Trial No. 1: *Pass  Unsatisfactory_____

Trial No. 2: *Pass  Unsatisfactory_____
PURposEful CHange:
A DEVELOPMENTAL MODEL FOR THE NURSING ProfESsion

by Lucile A. Wood

For many years the nursing profession has tried with small success to meet steadily increasing health needs of the nation. At the same time, nursing has sought to attain equal footing with other professions.

I believe we can attain professional status by developing the nursing career on the basis of widely differing nursing functions in succeeding steps on a five-level career ladder. For my purposes, I use the term "function" to mean nursing activities and their consequences as they relate to helping an individual patient, student, or practitioner establish optimal relationships with the surrounding environment.

The following developmental model, describing differing functions of nursing practitioners, seems to be a valid approach. It is based on specific facts derived from the current studies of the UCLA Allied Health Professions Project (AHPP), recommendations from various nursing reports from 1923 to the present, various states' efforts to revise their Nurse Practice Acts, and personal observations.

LEVEL I is the entering curriculum in nursing. It includes the 60% of activities common to all practitioners (NA, LVN, RN) as revealed in the AHPP national survey. In addition to nursing skills, a moderate amount of technical and scientific information in physical and behavioral sciences and a minimum of general knowledge are included.

LEVEL II is the curriculum in nursing research. Nursing practitioners have an opportunity to learn and practice basic nursing skills until a moderate competence is achieved. These practitioners would comprise an estimated 25% of the nursing workforce.

LEVEL III of the model prepares the basic nurse practitioner. This curriculum includes the remaining 40% of activities identified by our Project report. These are the more complex nursing skills accompanied by beginning theory relating to human functions, and theory and practice in problem-solving, decision-making, and communication skills. I see this level combining the strengths of the present LPN, Associate degree, diploma, and in some instances, baccalaureate curricula, to develop a competent basic nurse practitioner based on function.

LEVEL IV would comprise about 50% of the work force and would provide the bulk of direct nursing service to the patient.

LEVEL V would prepare the nurse researcher and would be on the level of present doctoral programs.

If our aim is to prepare a nurse to function differently at each level, a degree may or may not be necessary. This point is currently debatable. Nurses should understand that there is a difference between proficiency in nursing practice and fulfillment of requirements for an academic degree. It seems to me that practice and degree should be complementary and voluntary activities, and not mandatory for everyone.

LEVEL IV content would be of an advanced academic nature and would prepare teaching facilities for Levels II and III Programs, as well as administrative personnel for large health agencies. I believe that beginning research methodology should be offered so these graduates would be strong supporters of nursing research and could assist in identifying researchable clinical nursing problems.

Although Level IV would not be in place at this time, it would be possible to define a basic nurse practitioner license based on function. Nurses should understand that there is a difference between proficiency in nursing practice and fulfillment of requirements for an academic degree. It seems to me that practice and degree should be complementary and voluntary activities, and not mandatory for everyone.

LEVEL V would prepare the nurse researcher and would be on the level of present doctoral programs. If 12% of the nursing population would, in fact, be engaged in nursing research, we could expect to attain our professional status equal to or better than other nurse professions within the foreseeable future.

I see this five-step functional model as being a sound model for developing nurse practitioners. More importantly each level would include increasing and cumulative competence in nursing practice, decision-making, problem-solving, and in administrative, teaching, and communication skills.

Since the functions outlined in the model are widely different, it would be possible to define a more precise curriculum. Because the program would prepare widely different kinds of practitioners, a more proper utilization of the graduate could be expected.

The developmental model would permit a basic nurse practitioner license based on function. There would be a built-in means to continue education whenever needs produce a change in career goals.

The ultimate outcome of the implementation of this model would not only help nursing to achieve professional status, but most important, would realistically prepare and utilize every member of the nursing work force, directing all their efforts toward the provision of high quality nursing care.
THE RESULTS OF THE APPLICATION OF A MODEL OF NURSING BASED ON FUNCTION WOULD:

1. Prepare better nursing practitioners at each level,

2. Permit widely differing functions at each level, which would more precisely define curriculum content and the ultimate utilization of personnel.

3. Eliminate the present conflict among the various levels of nursing practice from the NA to the PhD,

4. Permit a basic nursing license based on function, and provide a means to continue education at any time that needs and desires produce a change in career goals.

5. Avoid duplication and overlapping of content, probably shortening the time needed to achieve a given level of practice. Although the length of time might be diminished, we would expect a better equipped performer of nursing practice and one with a sound base of theoretical knowledge.

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