Developed by television staff and personnel from a demonstration project funded by Title III of the Elementary and Secondary Education Act, this teaching guide contains four television programs designed to provide children from various socioeconomic backgrounds in Grade 3-8 with information concerning hospital, public health, and dental occupations. In addition to providing information, the materials are designed to demonstrate the role of work, develop positive work attitudes, and facilitate realistic educational choices. Information provided for the four television programs, which are revisions of tele-lessons first presented during the 1968-1969 school year, include: (1) study guides containing the purpose of the programs, highlighted concepts, vocabulary terms, supplementary books and films, and activities for before, during, and after the telecast, (2) the television scripts, (3) posters depicting the health personnel in their work setting, and (4) duties, personal qualifications, and training requirements for each occupation. To aid other schools in the production of similar programs, the guide contains a model and report describing the procedures followed in developing the materials. (SB)
Occupational Information
Occupational Information
Via TV

By
OCCUPATIONAL INFORMATION MATERIALS PROJECT

Atlanta Public Schools—Atlanta, Georgia
Dr. John W. Letson, Superintendent

Printed by POP Enterprises, Inc.
Atlanta, Georgia—1970
Professional Staff (1968-69)

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PREFACE

The television series, *Countdown to the 70's*, is one of a number of programs and publications developed by Atlanta's project, Formulation of Models for Preparing Occupational Materials for Pupils from Various Socio-Economic Levels in Grades Three Through Eight.* Funded under Title III of the Elementary and Secondary Education Act for a three-year period beginning August, 1967, this demonstration project sought innovative approaches to teaching children about the world of work.

Telecasts from WETV have communicated accurate occupational information to thousands of children who have viewed the 39 programs in the series. In addition, kinescopes of several programs have been viewed by numerous business and professional groups as well as school personnel and pupils in other communities.

Recognizing that today's reality may be tomorrow's fiction, WETV and the project staff cooperated to revise a number of the programs and to update co-curricular materials when the series was rescheduled for 1969-70. Thus, the four illustrative scripts with accompanying lesson guides and job descriptions are revisions of the original tele-lessons first presented during the school year 1968-1969.

WETV retains the 39 two-inch videotapes at 740 Bismark Road, N. E., Atlanta, Georgia 30324. Kinescopes are catalogued at the Learning Resources Center of the Atlanta Public Schools, 2930 Forrest Hill Drive, S. W., Atlanta, Georgia 30315.

*Generally referred to as the Occupational Information Materials Project.*
ACKNOWLEDGMENTS

—to the many people who helped so greatly in the production of Countdown to the 70's.

—to staff members of WETV:

Producer-Director William E. Scott for his expertise in TV production and direction; George T. McCurdy, studio supervisor, for his excellent photography; Assistant Producer-Director Daniel C. Royal; Broadcast Studio Crewman John K. York, Jr.; Nicholas R. Sapio, Thomas L. Joyce, George Holcomb, Terry L. Bearden, and Kenneth J. Adcock, broadcast studio crewmen; John L. Dockery, assistant chief broadcast engineer; Houston Beard, Edwin Crapps, and Jerry Gibbs, broadcast engineers; Patricia S. York for her assistance on the unit set; Patricia Miller, traffic manager; the clerical workers who assisted in numerous ways; and WETV Director Haskel L. Boyter for his interest and cooperation.

—to Ainsley Deutsch, studio teacher and composer of the Countdown to the 70's theme song, for his lively appearances on the unit set and his interesting narration of each filmed sequence.

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—to members of the project's advisory committee for their enthusiastic support, wise counsel, and active participation in the project's efforts.

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MODEL FOR PREPARATION OF
OCCUPATIONAL INFORMATION

TV SERIES
FOR UPPER ELEMENTARY
AND MIDDLE GRADES

Identify Series Format for Program
Talent Needs
Recruitment
Consultants
Selection/Orientation of TV Producer-Director
Studio Set
Lyrics
Music
Basic Graphics
For TV Series and Publications

Production steps for each TV-program
First draft script
Talent Graphics
Other
Final draft script
Rehearsal and trial tape
Preview tape
Critique
Revision
Final tape
Production

Lesson Guide content, format, construction, printing
Other program support printing: posters, brochures, etc.
Library resources coordination and outside media, press-radio
Development of program related non-print materials;
i.e. slides, recordings, etc.

Development of occupational models
and job descriptions

Continuing recognition of
Pupil interests and Perception of work

Identify Conceptual Emphases
Determine Unifying Series Theme

Training Facility

Consultants
A Model for Preparation of an Occupational Information TV Series for Upper Elementary and Middle Grades

To prepare accurate materials about occupations for pupils in grades three through eight was one of the specific objectives of the Occupational Information Materials Project, funded through Title III, ESEA.

The production of empirically based television programs and the preparation of a model that may serve other school systems are some major results of the project's efforts to accomplish its objectives.

In cooperation with WETV, the development of the series entitled *Countdown to the 70's* was begun in the spring of 1968. The first completed videotape, *The Hospital Team—Part I*, was telecast approximately five months after the initial conference that brought together representatives from various departments of the Atlanta school system. Thereafter, during the school year 1968-69, 39 programs showing 194 local workers were videotaped in their occupational settings. Lesson guides, job description booklets, and 37 poster sets were also produced and disseminated. The target audience for the series consisted of pupils in upper elementary and middle grades.

The following report of procedures, materials, and programs provides details that may enable others to expedite the production of similar programs and to avoid time-consuming exploration. All materials produced by this Title III project are in the public domain and may therefore be copied.

It should be noted that a great deal of basic research on children's interests, televiewing habits, knowledge of occupations, concepts and percepts preceded the actual planning stage. In addition, available human community resources, such as consultants and occupational models in their work settings, were assessed. The occupational outlook and the local educational facilities were also reviewed. Thus, the components of the model were determined by (1) the nature of the target audience; (2) community labor market traits and trends; (3) local educational facilities; and (4) human resources.
The Target Audience

Pupil personnel in the fourteen project schools consisted of multi-ethnic boys and girls with a vast array of interests and a wide range of mental and physical abilities. Many pupils came from disadvantaged, one-parent homes in which there was no earned income. Others lived with both parents in middle class neighborhoods where incomes exceeded the national median.

Follow-up studies of Atlanta students have consistently revealed that the majority are employed in Greater Atlanta after they leave school. A pragmatic approach to disseminating occupational information via TV thus demanded programs depicting local workers in their usual vocational settings.

With upper and lower socio-economic levels represented by the project schools, it was necessary to assess the effect of programs on both levels. Would pupils from the upper and the lower socio-economic level neighborhoods experience significant cognitive gains as a result of televiewing? Or was there a need for different types of programs for different groups? A test-retest research design was used to answer these questions regarding the effectiveness of selected programs from *Countdown to the 70's*. Both upper and lower socio-economic groups experienced similar gains.

A number of our colleagues in vocational guidance have pointed out that a pupil cannot manifest interest in an occupation of which he is unaware. Further, knowledge of its existence is not sufficient for realistic appraisal of an occupation. Exploration via TV is a means of providing vicarious experiences for the naive as well as the sophisticated. Both are observed to make grave errors in assessing the nature of work, the educational requirements for entry jobs, and the personality of successful workers.

Pupils who were asked to list jobs they knew about and jobs they had seen someone perform, frequently identified (1) health workers (specifically, the doctor and nurse) and (2) educators (usually, the principal and the teacher). Other health workers and school workers were seldom noted. In-depth interviews with 180 selected elementary and middle school pupils revealed that larger numbers were more interested in nursing and teaching than in other occupations.
On the basis of these preliminary findings that were useful in the development of various types of materials and the fact that training facilities, occupational outlook and human resources were favorable for program production, health occupations became the first cluster chosen for videotaping. Health workers were featured in the first four programs. School workers were featured in programs five and six.

The decision was made to focus on upper elementary and middle grades as the target audience, because this appeared to be the level for which very few commercially or locally produced materials were designed. Surveys of books in use in the project schools and numerous conferences with faculties, librarians, coordinators, principals, superintendents, and publishers' representatives preceded the decisions regarding the target audience, the time, format, length of programs, number of telecasts, and publicity that would insure adequate dissemination.

Teachers suggested afternoon as the best time for scheduling programs, citing the fact that fewer interruptions come after the lunch hour. The available afternoon slot for a twenty-minute telecast at 2:15 P.M. enabled the classroom teacher to discuss the program with pupils before and after televiewing.

Co-curricular materials provided opportunity for individualization of instruction and reinforcement. These materials included, as previously mentioned, lesson guides, job description booklets, and individual posters picturing each worker shown. The project staff assumed the major responsibility for preparing these materials, but educators and consultants worked to insure the production of accurate, useful materials.

Labor Market Traits and Trends

Greater Atlanta is a city characterized by economic expansion and rapid population growth. Health industries, government agencies, educational institutions, manufacturing, bottling, banking, insurance, retailing, food service, construction, transportation and communications offer thousands of career opportunities for young people who can do something and get along with their fellow workers while they do it.

Atlanta Area Labor Market Reports issued monthly by the Georgia Department of Labor provide up-to-date accurate information on the status of the labor market, new
businesses moving in, construction projects, and comparative data. These free reports, observed over a period of years, provide educators with realistic bases for curriculum modifications and pragmatic program developments such as the occupational television series.

In Atlanta, the unemployment rate ranged from 1.9 in January, 1969, to 2.1 in January, 1970. This figure does not, however, reflect the status of youth in the 16-19 age bracket where the rate of unemployment is consistently high. The Atlanta Urban Employment Survey, July 1968–June 1969, reports an unemployment rate of 25.35 among youth living in the Concentrated Employment Program area, which lies roughly within a 2½-mile arc around downtown Atlanta on the west and south side. This area is one of those served by project schools.

**Educational Facilities**

The school has the major responsibility of providing courses that enable youths to enter the labor market with marketable skills. Communities, parents and schools, however, share the responsibility for the development of their occupational competency.

Atlanta has 22 degree granting institutions of higher education, 24 business and career schools, 15 vocational and technical training schools, and 6 junior colleges.

Typists, stenographers, dictaphone operators, key punch operators, computer programmers, dental technicians, cosmeticians, practical nurses, auto mechanics, food service managers, dental assistants, welders, power machine operators, TV technicians, draftsmen, barbers, child development assistants, civil technicians, cake decorators, cashier-checkers, commercial cooks, offset duplicator operators, and medical office assistants are receiving training in Atlanta's public schools. In addition, numerous hospitals provide courses and on-the-job training in cooperation with the schools.

Thus, Greater Atlanta's educational facilities provide hundreds of courses that are designed to meet the needs of students and non-students of varying interests, abilities and motivation. It is a paradox that the unemployment rate among our disadvantaged youth remains high in the midst of educational and occupational opportunities.
Community Human Resources

For at least two decades, the schools and community resource personnel have shared a productive alliance. Civic and professional organizations, such as the Kiwanis Club, Atlanta Rotary Club, and the Atlanta Bar Association, have offered their services to assist schools and pupils. Business and industrial leaders have provided speakers, programs, and printed materials that convey specific occupational information. The Merit Employers Association has been active in demonstrating the growing opportunities for Negro youth. Hospital personnel and leaders in communications have also provided tours, speakers and programs. These activities have generally served high school students for the reason that schools requested the service for those who would soon be seeking employment or progressing to institutions of higher education.

Acquaintance with human community resources and the organizations with which they are affiliated provided a realistic point of contact for the staff members who worked to identify occupational models at different levels; i.e., professional, technical, skilled, semi-skilled and unskilled. A number of men and women from various organizations agreed to serve as members of the project’s advisory committee. They were willing and able to assist in materials development. Their aid was of inestimable value and it was all volunteer assistance.

Decisions and Productions

Literally thousands of decisions must be made in the course of producing a television series, whether for entertainment or for educational purposes. And conceptual models must be eventually translated into perceptual ones that communicate with the young learner who needs a view of the real world.

While conceptualization permits intellectual exploration of the myriad aspects of work and speculation on the changing nature of the society’s economy— it is the multi-sensory, perceptual presentation that brings reality into focus and negates erroneous concepts. Experience tells us that what workers do, where they do it, and the role that education plays in preparing the worker for his occupation, can be demonstrated exceedingly well through the medium of television.
After deciding to produce a twenty-minute occupational TV series for upper elementary and middle grades, WETV personnel and the staff of the Occupational Information Materials Project scheduled numerous conferences. These meetings resulted in the identification of a unifying theme and the development of a theme song that carried the message suggesting that now is the time to look around at the world of work—the choice is yet to come.

A producer-director, assistant producer-director, photographer, and audio-engineer were assigned to spend a portion of their time on the series. OIM staff members who worked on various aspects of the programs included the communications specialist (TV teacher), materials editor, guidance specialist, graphic specialist and the OIM project director. Working space for the group was provided at WETV during the summer of 1968 and throughout the school year, as needed. Three OIM staff clerical workers, who generally remained at the Instructional Services Center, assisted in materials production.

Only the communications specialist worked full time at WETV. Other members of the OIM staff were responsible for diverse materials development, publicity, and dissemination activities.

Some of the steps taken in developing the series were carried on simultaneously, and some of the paths were frequently retread; however, the narrative model here presented is graphically shown in the model on the following page. Those who choose to replicate the series will probably find it expedient to (1) select a qualified producer-director who has demonstrated his competency; (2) single out a unifying theme for the series; (3) prepare lesson guides and job descriptions; (4) employ a competent, creative TV teacher; (5) solicit services of consultants (preferably qualified volunteers); (6) design and build a studio set; (7) write music and lyrics for a theme song; (8) write scripts; (9) construct basic graphics for the TV series and publications; (10) establish production steps for each TV program; (11) select occupational models and work settings with the assistance of consultants; (12) film on-site sequences; (13) revise script, if needed; (14) rehearse in studio; (15) prepare trial videotape; (16) preview videotape; (17) edit and revise videotape; (18) telecast program.
After the program has been shown, assess its effectiveness through surveys, informal techniques, and approved research designs. The results of evaluation have implications for future programs.

The spirit of enthusiastic cooperation that pervaded the OIM staff and WETV during the developmental period was an indescribable asset in the production of the series. The strength of this intangible motivation contributed significantly to the successful production of *Countdown to the 70's*. 
NARRATOR AINSLEY DEUTSCH APPEARS ON SET BEFORE TV CAMERA

Computer CLOD can be seen in background
COUNTDOWN TO THE 70'S
THEME SONG

I

Come along with me,
Let's count down to the 70's.
Come along with me,
Let's see what there's to see
Of the work yet to be done,
New conquests to be won,
In science and industry.

II

So, let me take you by the hand,
Together we will understand
That there's a place for you and me
In the bright new 70's.
There's no need to fret and worry;
There's really no big hurry
To say what we're going to be.

III (Reprise)

The wondrous world of work awaits us,
The best things are yet to come.
What bend in the road will we soon be taking?
The choice is one of your own making.

IV

Come along with me,
Start the count down to the 70's.
We can hardly wait to know
What the future has to hold.
Let's get the show on the road,
Let our story unfold
As we count down to the 70's.
('68, '69, 70's)

Words & Music: Ainsley Deutsch
ARTIST JANICE BURRELL PUTS FINISHING TOUCHES ON BACKGROUND ARTWORK

*Bill Scott glances approvingly as he checks the unit set*
COUNTDOWN TO THE 70'S

OCCUPATIONAL INFORMATION
FOR
UPPER ELEMENTARY AND MIDDLE GRADES*

STUDY GUIDE
First Quarter

PROGRAMS 1—12

WETV CHANNEL 30
ATLANTA, GEORGIA

*This project was authorized by the U. S. Office of Education through Title III of Public Law 89-10
OCCUPATIONAL INFORMATION
FOR
UPPER ELEMENTARY AND MIDDLE GRADES

PURPOSE

1. To provide accurate occupational information to pupils in order that they may understand the various vocational opportunities that may be open to them in the future.

2. To demonstrate the role of work in the lives of people and to help pupils understand the role of work in their lives.

3. To help pupils develop positive attitudes toward work including a respect for all levels of work.

4. To motivate pupils to stay in school and to make realistic educational choices as they progress through the high school.

5. To help pupils understand the significance of attitudes and good work habits in career development.
COUNTDOWN TO THE 70'S

To The Teacher:

"Countdown to the 70's" has been planned and produced to offer pertinent occupational information to your pupils. With your encouragement, children may look ahead realistically toward their own future experiences in the world of work.

Ainsley Deutsch, the television teacher, and CLOD, his computer associate, will follow a humorous theme of whimsical conflict throughout the series in order to attract the children's attention. Mr. Deutsch will also be cast in the role of a worker in some programs.

Criteria for selection of occupations to be presented were: children's expressed occupational interests and knowledge of occupations, as indicated by a survey of Atlanta pupils in the project's nine developmental schools; the occupational outlook in the community and the nation; and training facilities available in greater Atlanta.

This study guide contains suggestions for supplementary activities which may help your pupils relate their own experiences to the material presented in the telecasts.

This guide for the first quarter is necessarily composed weeks in advance of program production. If any changes should be made in a program, we shall attempt to notify you prior to the telecast.

You, the classroom teacher, are the most important member of the occupational information team. Your suggestions and comments to the staff about this series will always be welcome.
SUPPLEMENTARY ACTIVITIES

Introduction

The teacher will be able to introduce many co-curricular activities which may encourage children to learn facts about different kinds of work. Because they are in an exploratory stage of development during the upper elementary grades, it is not advisable to suggest that the pupils select specific occupational goals.

Supplementary Materials

Most of the supplementary books and films suggested in this guide were designed for grade 6 or above. If you have pupils who prefer materials suitable for other grade levels, your librarian will be able to help you. Lists of occupational books, films, and filmstrips, with recommendations according to grade level and applicability of information, have been distributed to librarians.

Kinescopes of the television programs are available to teachers. They can be used with your school projector in the same way as motion picture films. The kinescopes may be requested from the Learning Resources Center.

Vocabulary

In order to meet the needs of your class, you may wish to modify the related vocabularies provided in this guide. An attempt has been made to include words which represent a range of difficulty levels.

Advanced Training Institutions

In most programs, the television teacher will refer to college, junior college, technical school, or high school training. It will be helpful to your class if you will explain the types of training offered by these institutions. A clear definition of what is meant by a college degree and graduate degrees will also benefit many pupils.
During Pre-planning Days

1. Obtain old magazines for pupils to use in collecting pictures of people at work. Other faculty members and friends can help you.

2. Prepare a resource file folder for each program and begin collecting pictures, posters, etc., for display use.

3. Consult your librarian about availability of books recommended for each program, as well as other materials discussed in the introduction to this section.

4. Request supplementary films and filmstrips if desired.

5. Prepare bulletin board showing workers on the hospital team. (See Guide for Lesson 1.)

6. Post program schedule.

During First Week of Classes

1. Organize pupils into teams to collect pictures of workers and to prepare weekly bulletin board displays.

2. Discuss the program series with pupils and view the first telecast with them.

During the School Year

1. Write words of theme song on chalkboard for pupils to copy and encourage them to sing along with the telecast. A phonograph record of the theme song may be borrowed from the OIM office.

2. Present films and filmstrips describing related occupations.

3. Encourage pupils to read books about occupations for leisure reading or for oral and written reports.

4. Pupils can assume the roles of workers through dramatic play. They can write short plays based on their interpretations of “Countdown to the 70’s” programs, outside reading, or interviews with employed acquaintances.

5. With your guidance, pupils can also create the roles of various workers through spontaneous role playing. For example: activities in a hospital pharmacy, a retail store, or a school library.
6. Use experiments and displays which may expand concepts presented in the programs. For example, different kinds of thermometers might be demonstrated in connection with "The Hospital Team," model airplane construction with "Aircraft Manufacturing," or a toy car display with "The Car in Your Future."

7. Children may make scrapbooks on occupations... include vocabulary, pictures, clippings and original stories or reports of interviews with workers.

8. Pupils may be encouraged to interview acquaintances in various lines of work and report on these to class.

9. Invite parents and other relatives of pupils to visit your class and describe their work.

10. Plan a field trip to a business or industry of interest to your class. It is, of course, advisable to investigate available tours, transportation, and school policy before discussing the visit with pupils.

11. Let children help develop a vocabulary list to supplement words provided in the lesson guides.

12. Pupils may make photographs of people at work.

13. Ask pupils to write stories or poems which reflect their concepts and interpretations of facts about workers.

14. Let pupils draw pictures to illustrate various jobs. Use for displays.

15. Organize pupils into teams to collect or draw pictures of people at work and use these in preparing weekly bulletin boards.

16. Ask children to help develop a chart of the major industries in Atlanta, showing how they contribute to community well-being.

17. List some of the many occupations on which Atlanta depends for successful business and industry.
Hospital Team

PART I
COUNTDOWN TO THE 70'S

Study Guide

Program 1: The Hospital Team (Part I)

Purpose The purpose of the program is to present the work of the following select-
ed members of the hospital team: doctor, nurse, orderly, chaplain, radiologic tech-
nologist, admissions clerk, and ambulance driver.

Concept Highlighted Each member of the hospital team performs a valuable func-
tion working interdependently with others to prevent or relieve suffering. Many
health workers, with a wide range of responsibilities, will be needed in the 70's.

Before the Telecast

1. Collect or draw pictures of hospital team members
   performing the work within the hospital.
2. Make a display of pictures of members of the hospital
   team and settings in which they work.
3. List on chalkboard the workers to be viewed in this
   program. Study spelling.
4. List on chalkboard the related vocabulary for this tele-
cast. Study spelling and definitions.

During the Telecast

The work of the hospital team will be discussed and illustrated. Views
of the work settings at Grady Hospital will be presented.
After the Telecast

Discussion:

1. Discuss the work of the members of the hospital team that you viewed. How do their jobs differ and how are they alike?
2. What kinds of training do you think are required for each of the jobs you viewed?
3. Will these people be needed more, less, or about the same in the 70's?
4. What kind of person do you think would succeed on the hospital team?
5. How do you feel about the jobs that were included in the program?

Activity:

1. Use supplementary books and films to expand concepts of this program.

Related Vocabulary (See Glossary for appropriate definitions)

- apparatus
- diagnosis
- emergency

- germ
- instrument
- patient

- pneumatic
- procedure
- stethoscope
- therapy

Supplementary Materials

Books:


Films:

OUNTDOWN TO THE 70’S
(Produced at WETV—Atlanta, Georgia)

Show Title: The Hospital Team Part I

Teacher: Ainsley Deutsch
Director: Bill Scott

UNIT SET
AD seated at desk

VIDEO

AUDIO

AD: This is a busy time of the year for you. You’re back at school again—and you have another nine months of good hard work ahead of you—and also, I hope, lots of fun.

I will be visiting with you every week of the school year on this program, “Countdown to the 70’s.” Let me take a minute or so to tell you about it. I am Mr. Deutsch and I will be your guide through this series which deals with jobs as they may exist during the middle 1970’s.

Give or take a year or so, by the mid 70’s—say 1975—you will be about 18 or 19 years old! Exciting, isn’t it? Many of you will be working; some of you will be in college; and still others will be training for jobs. I suppose some of you might even be married. And imagine, all of this will happen to you in the next 6 or 7 years.

There are all kinds of decisions you are going to have to make, but by far the most important single decision you are going to make—is the way you are going to make your living. This is the big choice!

Some of the experts who have studied this problem of making a career choice believe that there are 3 steps or periods of time that most people go through in making this decision—
The first step is the Make-Believe step which runs, I suppose, from age 3 years to about 11 years. If you can remember that far back, this was the time you were thinking about being a cowboy—or a space explorer—or a movie star—or other unusual careers.

The second step—which runs from about 11 years to about 17 years—we might call the Questioning Step. Roughly, this is where you are right now. You realize that you won't really be a cowboy—or a girl astronaut—but that you are faced with the problem of making an occupational choice. Now is the time to look around and show some interest in the many different ways there are of making a living. You don't have to make a choice at this time. All we want you to do is look around and start thinking about the world of work. And that is why we are here; that is the real purpose of this TV series.

The third step, starting at about 17 years, is the time that one gets down to the practical facts and tries to make a wise choice. The more facts you have, the more accurate information you have, the better your chances are of making a good choice. That makes sense, doesn’t it?

Here at the Control Room at the Job Information Center, we have all sorts of information available. Government reports, university studies, and private research tell us about jobs that will exist in the 1970's. We are going to show you some of these. Then let's make believe that I am talking to you from the year 1975...
VIDEO

Dials light up and the Titles show:

Computer
Long Range
Occupational
Director

AD pulls out an IBM card

AD inserts card
CLOD on Rear View projection—sign shows HEALTH CAREERS

Insert Card No. 2
Rear View Projector

AUDIO

Just a minute... I wouldn't think of not telling the class about you... This is a most valuable machine which we will be using. You see, we are continuously feeding information into this computer and keeping it up to date. By programming facts into his memory banks we enable him to compute all kinds of information about occupations...

Pretty much the way our own minds work.

Let's turn on a few switches and see how it works.
(Sw I) Computer, (Sw II) Long Range, (Sw III) Occupational, (Sw IV) Director.

Put them all together and they spell C-L-O-D, or “CLOD” for short. (Aside) CLOD doesn't like that name particularly—but for that matter—I don't think CLOD particularly even likes me. If he does— you couldn't tell it. CLOD is always playing all kinds of practical jokes on me. He may think I don't know that he's playing jokes on me, but I do. There is never a dull moment around here—not with my good buddy CLOD.

Well, I think that it will be much easier for you to see how things work as we start out.

CLOD, what do you have listed as one of the most important industries in the United States by the mid-seventies?

CLOD: Health careers. In the late 1960's the HEALTH industry was the third largest with between three and four million men and women engaged in improving and protecting the health and well-being of our country. Now it is among the top industries.

AD: I wonder why? Let's insert the next card and see what happens.

Thank you, CLOD.
Show Slide 2:
Reasons for Growth
1. Scientific advances
2. Health-consciousness
3. National prosperity
4. Population gain
5. Longer life

AD and CLOD: 1 - Scientific advances; 2 - Health-consciousness; 3 - National prosperity-
CLOD: (Indignantly) Please, sir, I can do it myself-(continues) No. 4 - Population gain; 5 - Longer life...
AD: Very good, CLOD—but I think we ought to demonstrate teletransportation—you know—the technique we use for getting to the site where the jobs are.
CLOD: Oh! Very well. Let's take them out to where the action is—let's take them out to a metropolitan hospital. Sixty percent of all health industry jobs are in a hospital—(To AD) Sir, get into the teletransportation booth—that is, if you want to come along. And—by the way, how do you see yourself in the hospital setting?
AD: Well, CLOD, I just happen to have my stethoscope and my “Do-It-Yourself Brain Surgery Kit” handy. I think I'd like to be chief surgeon. What do you think of that?
CLOD: Well, hardly, sir. We'll see what we can do.
Film shows Deutsch pushing stretcher
V/O Deutsch

V/O CLOD

V/O Deutsch

Flashback to the scene of the accident.

Siren sound
Grady ambulance pulls up at the scene.

AD: Oh, CLOD, you've done it again. This is not exactly what I had in mind.

CLOD: Hard luck, Chief. But there just aren't any openings in surgery; and besides, we just happen to need orderlies at this hospital. Say, what's the matter with that little girl?

AD: Oh, this is little JoAnne Archer. She was hit by a car on her way to school. I'm afraid right now she may be a sick little girl. The student nurse and I are taking her up to x-ray. JoAnne was trying to cross the street in front of her house while she was on her way to school, and she was hit by a car accidentally.

The police car you see there arrived at the scene of the accident only a matter of minutes after a neighbor called the police. This is an accident investigating unit. The alert young officer has already called the dispatcher at Grady Hospital to send an ambulance unit. Right now, the officer is taking information from the witnesses who saw the accident and this will all be part of his report as he follows this little girl down to Grady and through the time she will either be admitted to the hospital or discharged. I know it will only be a matter of minutes now before the Grady ambulance will be arriving at the scene. I can hear the siren now. It's on its way.

The ambulance team is made up of two men, the ambulance driver and the ambulance attendant. As you can see, this team moves smoothly and efficiently in a well practiced manner. Emergencies like this are routine for them. Over 70 emergency calls are dispatched daily from Grady Hospital. Most of them are accident cases. As you can see, the driver of the ambulance is a mature man. There's no room for a hot rodder behind the wheel of an ambulance. While speed is
important, safety is more so. The driver must have an excellent safety record. Both he and the ambulance attendant must go to school where they will be taught important first-aid procedures. They are always taking refresher courses and their skills are being updated as new techniques are made available. Many of the young men who start out as ambulance attendants go on to take additional training in other phases of hospital work. The ambulance attendant you see here, later enrolled in a course in hospital administration.

As you might well imagine, this kind of work is an excellent way to get experience in dealing with emergencies. Even though emergencies like this one are routine for the men on our ambulance team, they never become hardened to what they see. Every time they are dispatched their chief concern is the human being who needs help fast.

The ambulance team quickly determines that the little child has received head and leg injuries. Their most important job now is to get the child to the hospital where she can receive professional treatment in one of the many emergency rooms at the emergency clinic. Years ago an intern would accompany the ambulance but this is no longer so. The ambulance team works efficiently, quietly. Here they are applying a pneumatic splint to the child’s leg. A plastic bag is carefully moved over JoAnne’s leg and then zipped up. It is then blown up much like a balloon, and this helps to stop the flow of blood, and it protects the leg until the doctor can take a look at it. The child’s mother is assisted into the ambulance, and off they go back to Grady.

The ambulance is gliding to a stop outside the Margaret Mitchell Memorial Clinic. This is her first step on the road to recovery. JoAnne is tenderly lifted onto the examining table as the emergency room team springs into action. The resident
Intern shows on film

doctor's practiced hands begin a careful examination to determine the extent of her injuries. The intern, who is helping the resident, has been through a pre-medical course in college which took four years of medical school. Now he is a medical doctor serving a two-year internship at Grady.

To become a doctor one must work hard, study for a long time, and be devoted to medicine. In 1975 at least three hundred and fifty thousand physicians will be required to meet the nation's growing needs; and at that time nearly 10,000 physicians a year will be graduating, which is almost 2,600 more than were graduating each year in the 1960's. To become a doctor requires certainly more than above average intelligence. Desire and hard work are really not enough to make up for an inability to learn and organize information easily. A love of science and a questioning mind are important. Self-discipline is absolutely necessary because not even a good mind or pleasant personality can make up for mental laziness and poor work habits. A physician must be strong and healthy. He must be prepared to withstand great strain. Of course, he must also be interested in people. He must regard each patient as an individual, since no two patients are alike. He must be able to make the right decisions at the right time. He must never become so tied up with the personal problems of the patient that he cannot do what is best for him.

The emergency room nurse is a registered nurse who has completed the hospital diploma program at Grady, which takes three years after high school. Professional nursing is the largest of the nursing fields. As a field of employment, it ranks second only to teaching in size. In the late sixties there were approximately 600,000 professional nurses in service. Medical and nursing leaders, to say nothing of our foremost
authority CLOD, forecast the need for over 300,000 more professional nurses by 1975. Nursing, like medicine, enables a person to specialize in an area that interests him most.

This emergency room nurse works well under pressure and she is good with her hands. An additional quality that a nurse should have would be an inquiring mind. A good nurse always asks "why", "why is the child crying or in pain?" Florence Nightingale, one of the most famous of all nurses, described nursing as a profession that helps people to live. A nurse must be devoted to helping people of all kinds, for sickness and helplessness make no distinction as to race or creed. Nursing is downright hard work; and it calls for good physical health, sound judgment, dependability, and a sense of responsibility for the lives and well-being of the patients. A good nurse must know how to follow orders intelligently and get along with other members of the health team. And the doctors look to her for her ability to deal with problems on her own when she has to. She's got to be calm and quiet and act quickly in an emergency.

(Pause)

The nursing supervisor comforts JoAnne's mother who at this time is quite worried about her little girl. Like most modern hospitals, Grady has a number of chaplains on its staff. They also have a training program for hospital chaplains. The chaplain calls on hospitalized patients taking care of their spiritual needs and comforting them and their families in time of stress and sorrow.

This young minister is going to help JoAnne's mother with the information which will be needed to complete all of the reports.
This clerk typist is one of the many employed at Grady. She needs a certain minimum typing speed and accuracy, but above all she needs to have a friendly attitude in helping people over some mighty rough spots. She should also enjoy working in a hospital setting.

Taking an x-ray is standard medical procedure. They are taken whenever an accident has occurred. These special photographs also help in finding out the extent of the fracture or break which is already evident to the doctor. And so, JoAnne has been taken up to the children's x-ray laboratory where these two young people will be working with her.

The young lady is a radiologic technologist. The young man is in training at the school of radiologic technology. They used to be called x-ray technicians, but the field of radiologic medicine has grown a great deal. It now includes diagnostic radiology which helps the doctor to find out what's wrong with a patient in such ailments as ulcers, TB, tumors, heart disease and other internal problems. It also includes radiation therapy. This means that the radiologic technologist helps to treat disease by exposing certain parts of the patient's body to carefully prescribed doses of x-ray or other forms of radiations, such as Cobalt 70.

There is another field called nuclear medicine, and this has to do with actually injecting radioactive substances into the body or into a vein. After this radioactive substance has been administered to a person, a machine called a "scanning device" picks up these radiation outputs and gives the doctor a clear picture of how an organ of the body is working.

To be a radiologic technologist, a person should be very thorough, very accurate and dependable, and especially safety conscious. You can't make a mistake, because the danger to the patient is so great. The technologist must be very
careful to be sure that he and the patients are protected from the hazards of over-exposure to radiation. The technologist must also be tactful and understanding in dealing with the patients. He must also be prepared to keep up to date with the new developments in the field, since new things are happening so fast in the field of radiologic medicine. The radiologic technician should be mechanically inclined. He should have an aptitude and ability in physical sciences and math. The school here at Grady takes two years and you need a high school diploma before you can be admitted. For those who want to go even further in the field of radiologic medicine, a student could choose a four-year college course and get a degree. Now, to become a registered radiation therapy technologist, the student must complete the same training plus one additional year of classroom study and work experience. This includes studying nursing procedures, physics, radio biology, radium therapy, and protective procedures. Radiologic technology, like most other health careers, is expected to grow by leaps and bounds in the near future. Wider use of x-ray in diagnosing illness and in the treatment of disease or injury and new scientific advances are the real reasons for this expected growth. Now these continuing advances within the field make the work challenging and interesting. Generally speaking, the technologist with a college degree has a greater chance to advance in this field.

It is by means of the radiograph or x-ray that the doctor now decides to admit JoAnne to the hospital.

JoAnne and her mother have been told that she is not seriously injured—that she will get well—and the clerk from the admissions office takes additional information down so that JoAnne can be admitted to the hospital. She is going to be here for a couple of weeks.
VIDEO

On film—
Stretcher with JoAnne
Student Nurse and AD

AD disappears.
Film shows student nurse shrugging her shoulders, obviously puzzled.

AD gets out of teletransportation booth back at Job Information Headquarters.

Credits supered over closing film.

AUDIO

I am moving JoAnne with the help of the student nurse up to the room where JoAnne will be living for a little while.

AD: No! No, CLOD, not yet! I have too much to do here.
CLOD: Oh, no, I need you here!

AD: (indignantly) CLOD! Why did you have to pull me back?

(Facing camera) Well, we will just have to go back to Grady again. We haven't scratched the surface yet on the many jobs that are available at the hospital. Besides, I want to find out how JoAnne is getting along. See you again next week.

Closing theme music (tape).
RADIOLOGIC TECHNOLOGIST
ORDERLY
AMBULANCE DRIVER
Countdown To The 70's

OCCUPATIONAL INFORMATION
FOR
UPPER ELEMENTARY AND MIDDLE GRADES*

DESCRIPTIONS OF HEALTH CAREERS
SHOWN IN
PROGRAMS 1–4

WETV CHANNEL 30
ATLANTA, GEORGIA

*This project was authorized by the U. S. Office of Education through Title III of Public Law 89-10
To the Teacher:

One of the purposes of "Countdown to the 70's," as pointed out in the Lesson Guide, is to provide accurate occupational information to pupils in order that they may know about the vocational opportunities that will be open to them in the future.

To make it easier for you to convey this information about occupations shown in the telecasts, definitions and descriptions of the jobs are included in this booklet.

Careers in various areas of the health field are included in this group.
PHYSICIAN

A physician, or doctor, diagnoses and treats people who are ill or in poor health. He also tries to prevent illness and aids in the rehabilitation of sick or injured people.

| DUTIES | Examines and treats patients in their offices or in hospitals.  
|        | Performs various kinds of operations.  
|        | Visits patients at home when necessary.  
|        | Duties may be limited to one of 20 fields of medicine in which physicians may specialize.

| SOME PERSONAL QUALIFICATIONS | Ability to learn and to think.  
|                              | Willingness to study throughout his or her lifetime.  
|                              | Ability to do well in science.  
|                              | A natural curiosity.  
|                              | Good judgment and “stickability.”  
|                              | A liking for people and a sincere desire to serve them.  
|                              | Good health.  
|                              | Human understanding and ability to work well with others.

| TRAINING | High school graduate.  
|          | 4 years of college in premedical preparation.  
|          | 4 years of medical college.  
|          | 1 or 2 years as an intern in an approved hospital.  
|          | 2 or more years of residency or additional study for specializing in one of the approved 20 fields.

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PROFESSIONAL NURSE

The registered professional nurse plans and carries out a program of nursing care of patients—according to doctors' orders.

<table>
<thead>
<tr>
<th>DUTIES</th>
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<tbody>
<tr>
<td>Gives medicine and treatment prescribed by doctor.</td>
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<tr>
<td>Observes and records reactions or changes in patient's condition.</td>
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<tr>
<td>Assists in educating patients to help themselves.</td>
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<tr>
<td>Performs any duties necessary for the well-being of the patient.</td>
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<tr>
<td>May have duties of a supervisory nature.</td>
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</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
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<tbody>
<tr>
<td>Intelligence, integrity and a sense of responsibility.</td>
</tr>
<tr>
<td>Strong desire to help others.</td>
</tr>
<tr>
<td>Willingness to work with all types of patients.</td>
</tr>
<tr>
<td>Sympathetic and understanding nature.</td>
</tr>
<tr>
<td>Good judgment and ability to act quickly; self-discipline.</td>
</tr>
<tr>
<td>Good health and an alert mind.</td>
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<thead>
<tr>
<th>TRAINING</th>
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<tbody>
<tr>
<td>1. Associate degree in nursing—a two year program usually offered by junior colleges.</td>
</tr>
<tr>
<td>2. 3-year diploma program offered by hospitals or independent schools of nursing.</td>
</tr>
<tr>
<td>3. College degree with a major in nursing.</td>
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RADIOLOGIC TECHNOLOGIST

The radiologic technologist (sometimes called x-ray technician) is trained to operate x-ray equipment and to take x-ray films (called radiographs) of various internal parts of the body. The doctor (or pathologist) uses the radiographs in determining the cause of and treatment for diseases.

<table>
<thead>
<tr>
<th>DUTIES</th>
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<tbody>
<tr>
<td>Operates x-ray machinery.</td>
<td>Makes radiographs or pictures of the internal parts of the body;</td>
</tr>
<tr>
<td></td>
<td>processes the film in the dark room; submits it to the doctor</td>
</tr>
<tr>
<td></td>
<td>for his diagnosis.</td>
</tr>
<tr>
<td></td>
<td>Assists in giving radiation therapy when it is used in treatment</td>
</tr>
<tr>
<td></td>
<td>of diseases.</td>
</tr>
<tr>
<td></td>
<td>Assists in use of nuclear medicine.</td>
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</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>An aptitude for working with machines.</td>
<td>An interest and ability in the sciences.</td>
</tr>
<tr>
<td></td>
<td>Accuracy, dependability, and safety-consciousness.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
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<tbody>
<tr>
<td>High school graduation.</td>
<td>24 months of training in a school approved by the American</td>
</tr>
<tr>
<td></td>
<td>Medical Association.</td>
</tr>
<tr>
<td></td>
<td>One year's additional training required for registered radiation</td>
</tr>
<tr>
<td></td>
<td>therapy technologist.</td>
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</tbody>
</table>
HOSPITAL ATTENDANT OR ORDERLY

The hospital attendant, or orderly, performs routine duties in caring for men patients in hospitals. In addition to these, he may be asked to perform a variety of other tasks.

| DUTIES | Bathes, dresses, and shaves patients.  
May massage patients or take other actions to improve their comfort.  
Makes the beds and keeps the room tidy.  
May fill trays for doctors.  
Moves patients from one place to another within the hospital.  
Duties may vary from hospital to hospital. |
|---|---|
| SOME PERSONAL QUALIFICATIONS | Willingness to work with all kinds of sick people.  
A sincere liking for people.  
A keen sense of responsibility.  
A desire to relieve suffering.  
A willingness to perform many kinds of tasks. |
| TRAINING | On-the-job training—the length of training varies with hospitals. |
The hospital ambulance driver is a person who is qualified to operate an ambulance for emergency purposes.

| DUTIES | Transports sick or injured persons from home or other places of origin to hospital.  
|        | Assists in placing person on ambulance stretcher which is safely fastened in ambulance; exercises care and compassion in moving patients.  
|        | Drives ambulance rapidly but obeys all traffic laws; makes certain that all safety rules are complied with.  
|        | Assists in moving ambulance patient from ambulance to clinic or to wheel chair; returns some patients in similar manner.  
|        | Maintains ambulance in efficient operating condition and keeps ambulance neat and clean at all times.  
|        | Prepares reports regarding departure and arrival time of ambulance during emergency calls.  
|        | Administers first aid or emergency care to persons injured or ill. |

| SOME PERSONAL QUALIFICATIONS | Comprehensive knowledge of the city and its suburbs; knowledge of ambulances and ability to make minor repairs.  
|                             | Ability to operate quickly, quietly, efficiently; sincere concern for persons who are ill or injured and a desire to relieve suffering.  
|                             | Ages—23 to 50 years. |

| TRAINING | High school graduation.  
|          | Two-weeks special course dealing with all phases of emergency care.  
|          | Continuous on-the-job training in clinic—when not making ambulance runs.  

| 43 | 50 |
BILL SCOTT, PRODUCER DIRECTOR, SIGNALS CAMERAMAN FROM CENTRAL CONTROL BOOTH
Assistant Director Danny Royal is busy at the control panel
Hospital Team

Part II
Program 2: The Hospital Team (Part II)

Purpose  The purpose of the telecast is to illustrate the work of the hospital dietitian, the housekeeper, the medical laboratory assistant, the medical laboratory technologist, the occupational therapist, the physical therapist, and the pharmacist within the hospital setting.

Concept Highlighted  The successful operation of the hospital depends on the conscientious and cooperative efforts of each member of the team. Many different kinds of people with many different interests are on the hospital team.

Before the Telecast
1. Prepare display of hospital jobs to be shown in Program II.
2. Discuss with children the hospital workers seen last week, reviewing their functions.
3. List on chalkboard the hospital workers to be shown this week and the related vocabulary. Study spelling and definitions.

During the Telecast
The functions of various members of the Grady Hospital team will be shown as they work together to serve patients.

After the Telecast
Discussion:
1. What occupations did you see today?
2. Describe what the workers did.
3. How were stairsteps used in a special way? Who had a typewriter?
4. How did you feel about the jobs you saw?
5. How could your schoolwork help you in these jobs?

Activities:
1. Use supplementary books and films to increase related knowledge.
2. If any pupils have visited a hospital, let them describe the work they saw.

Related Vocabulary (See Glossary for appropriate definitions)
- disinfect
- equipment
- exercise
- menu
- microscope
- nutrition
- prescription
- rehabilitate
- sterilize

Supplementary Materials
Please see materials suggested for Program I.

Resource Publications: The Hospital People; Horizons Unlimited.
Available from Occupational Materials Project office, Room 201, Instructional Services Center.

Consultants
Mrs. Nancy C. Wooten, R. N., Registrar and Field Director of the Professional Schools, Grady Memorial Hospital.

Arthur J. Arseneault, Jr., Secretary of Georgia Health Careers Council.
Unit Set
AD on set
Show: Doctor
Intern
Nurse
Ambulance Team
X-ray Technologist
Orderly
Show job titles.

AD: Last week, as you recall, we went out to Grady Memorial Hospital to take a look at the many jobs which are available in the Health Careers field. What I have in front of me is a print-out that CLOD prepared for me; and these little red dots mean that we have already talked about the doctor, the intern, nurse, ambulance driver and his assistant, the x-ray technologist and the orderly. And I see our computer has also made a little mark along side some other job titles: the housekeeper, the dietitian and in that same field the food service supervisor and the food service maid, the lab assistant, the lab technologist, occupational therapist, physical therapist, pharmacist. And these are the people we are going to visit today, according to CLOD. That only scratches the surface of the jobs available at Grady. There are over 450 different kinds of jobs being done by over 2,500 people out at that fine hospital. For those of you who weren’t here last week, this computer long-range occupational director, or CLOD for short, is a very valuable piece of equipment. Like most computers he stores a tremendous amount of information in his memory banks. But we have so much to do today that we’ll go directly to Grady by means of teletransportation, which is the means that CLOD uses to get me out to the jobs we’re
CLOD's light blinks.

AD goes into teletransportation and the camera can zero in on the slot message which states, "Revolting!"

Film shows JoAnne in hospital room.

talking about. We haven't a second to lose. I am very anxious to find out what happened to JoAnne; and, as you can see, I'm already dressed in my orderly's uniform. Are you ready, CLOD?

CLOD: I'm getting my blast-off voltages up to peak strength. Why don't you tell the students how they can get in touch with me? You know, even a computer gets lonely, and I like to receive mail. With the astounding amount of information I have stored in my memory banks, I should be able to answer any question that these humanoid children can pose.

AD: That's what I like about you, CLOD, you're so humble. We have been receiving some mail—most of it good—and the students have been asking a number of interesting questions. To get in touch with CLOD, merely write these questions down or any comments that you have. Give them to your teacher, and she will send them to CLOD through school mail. Just think of the money you'll be saving on postage.

AD: Are you ready to blast off?

CLOD: Right, Chief. You'll get a charge out of this.

AD: That trip was an electrifying experience. This is great, CLOD—Room 711. Just as you said. There's little JoAnne Archer in her hospital bed. I'll sneak in to see her while no one is around. She looks a lot better than she did the last time, doesn't she? They say she's going home today. How about that? I told her I'm not even supposed to be here, but I just had to come by to see how she is coming along. Well, she doesn't seem to need a thing. It's almost lunch time and I told her I thought I saw a bunch of trays down the hall,
and they're headed this way. It's time for me to scat now. I've promised to see her down at the pharmacy (you know—the hospital drug store). That's where she'll pick up her medicine before she leaves the hospital.

The housekeeping staff here at Grady plays an important role in the hospital's operation. Cleanliness is extremely important in a hospital, you know. Keeping this place spic and span requires someone on the job at all hours. Think of all the windows, walls, and floors!

The person you see here is a housekeeper. She has a happy attitude toward her work and presents a neat appearance as she performs her various duties. Today she is mopping and dusting the patients' rooms. She likes this kind of work. She also likes being around people. She takes time, too, to have a friendly word with JoAnne as she goes about her work.

An administrative housekeeper is the person who actually plans and organizes the hospital's cleanliness campaign. Some hospitals prefer that this person have a four-year college course with a degree in some phase of management. Probably by the 70's all hospitals will expect the head housekeeper to have this kind of college training. Think of the tremendous job she has in a hospital the size of Grady.

The housekeeping supervisor is another member of the housekeeping team. The one you see here is making a routine inspection of the rooms. Her friendly manner makes it easy for other people to work with her. She, too, takes time to talk to JoAnne. That's good therapy, you know. The supervisor spends lots of time on her feet and really needs to be a healthy, energetic person. On-the-job training is provided for this position. This supervisor likes her hours here and enjoys camping with her family when the weather and season are right.
The person who brought JoAnne's tray is a dietary maid. In some hospitals she may be called a tray girl. Notice her cheerful manner and crisp appearance. She has to be accurate and alert, too. It's part of her job to see that each patient gets the tray especially prepared for him. There can't be any mix-ups. Um! JoAnne's food looks appealing, doesn't it? It took some careful planning and originality to come up with those creations. This young lady is on Cloud 9 today. The personnel office told her that she passed her G.E.D. or High School Equivalency Test with flying colors.

Looking in on JoAnne now is the food service supervisor. This young lady—who, by the way, is from Formosa—has a college degree. Grady, however, trains food service supervisors in a nine-month course. They prefer to have high school graduates. Grady has 10 food service supervisors, who check the service and sometimes supervise food production.

The therapeutic dietitian talking to JoAnne plans special diets for patients who can't eat a normal diet. She visits patients to find out what they like best, and she even supervises the cooking to see that the food is prepared properly. She often teaches a patient or his family how to prepare his diet when he leaves the hospital. The dietitian here is telling JoAnne that she will be able to eat a normal diet but cautions her to eat her meat and vegetables and to drink lots of milk. The therapeutic dietitian is also a member of the American Dietetic Association which means she's had four years of college followed by a year's training in a hospital. The chaplain you see there with JoAnne has been keeping track of her from the time she was admitted to Grady. There are just a few Hospital Chaplain Training programs like this in the South. Young ministers of all denominations or faiths...
may enroll. The hospital chaplain takes care of the spiritual needs of the patients. He also tries to make them happy—and comforts them when there is sorrow. The training program for chaplains lasts from three to twelve months. The young ministers need to have unusually happy and “outgoing” personalities and to have a real concern for the feelings of others.

A medical laboratory assistant is taking a sample of blood from JoAnne. Then it will go to the hospital laboratory where a technologist will check it for the blood type. Everyone has his own special blood type, you know. The assistant is trained not only to take samples of blood and other body fluids, but also to perform many kinds of laboratory tests. Her work in the laboratory is done under the supervision of a pathologist (the doctor in charge) or a medical technologist. In technical schools it takes a high school graduate a year to receive the training she needs. It takes 2 years if she attends a training program offered in a junior college.

The young lady we just saw is able to work quickly and accurately with her hands. She says that good eyesight and also a curiosity about the sciences are a “must” if you wish to be a lab assistant. She likes her work here—and though the hours vary, she still has time for bowling—her favorite sport—and for dating a young man who also happens to be a medical technologist.

CLOD’s forecast shows a need for more than 100,000 lab assistants in 1975. And don’t tell him I said so, but CLOD is usually right.

JoAnne's blood sample is now being checked by a medical laboratory technologist to find out exactly what type it is. This is being done so that if little JoAnne should need
additional blood—at a later time—they will know the correct type to use. Using the wrong type could be dangerous.

This particular technologist works under the direction of the hospital’s blood bank supervisor. The blood bank supervisor needed an extra year’s training to qualify for this job. The blood bank is where blood of all types is stored—ready for a patient’s use. A strong desire to find out “why?” when you study sciences may lead someone to enter this exciting field. Three years of college training, preferably a degree, with an emphasis on chemistry and biology is required to be a medical technologist. This is followed by practical experience received in a 12-month training program in an approved laboratory.

The medical technologist is really a detective of a sort. She knows how to perform hundreds of laboratory tests using a microscope and other specialized machines. Through this, she discovers or uncovers facts that help the doctor to diseignose the cause of disease and to determine what treatments to follow.

It’s a rewarding, satisfying feeling to know that her work is actually dealing with matters which can save lives. It’s important for the medical technologist to be accurate, thorough, and determined. Although this young lady intends to be married shortly and start a family of her own, this type of training will enable her to return to this exciting work again if she ever had to. The shortage of trained medical technologists will continue for some time to come.

The occupational therapist is a member of what we might call a “recovery team.” He helps patients to cure themselves by doing things. This occupational therapist is checking JoAnne’s ability to work quickly and correctly with her hands. She had a head injury, you know, and what she does
on these tests will help him rule out any brain damage. This will also check her ability to use her muscles in a coordinated manner.

A therapist must have a warm friendly personality. It helps him to get to know his patients, and it makes it easier for him to plan activities that will do the most good. You see, he has to help people recover both mentally and physically.

Sometimes he uses what would appear to be games to help a child develop certain muscles. He plans entertaining activities for patients who are bored. He even helps some patients learn skills that may be used later to develop into interesting hobbies. Certain skills are even uncovered which will help a person to earn a living. It takes understanding and patience to deal with the many kinds of people he serves, and it takes imagination to plan things to meet their needs.

After graduation from high school, the occupational therapist must have four years of college training. He does special study in the health sciences and in occupational skills. He must also complete a nine- or ten-month period of training at a hospital or health agency.

The physical therapist is also a member of the "recovery team." He or she helps disabled patients to overcome their handicaps. The therapist literally "makes the lame walk." The therapist you see here is teaching JoAnne how to use her crutches. The little girl needs special training in how to go up and down stairs. As you've noticed here, the therapist uses many kinds of equipment in working with patients—also many kinds of exercises.

The treatment of patients may also include warm baths or pools, hot and cool treatments, massage, and special electrical currents that help paralyzed muscles to work.
The therapist must know how to perform tests that help her decide what kind of treatment to use. She must be able to teach patients how to carry on treatment at home.

Most important of all, perhaps, the therapist must help the patient to have a good attitude about the treatment so that he will cooperate and respond more rapidly.

You need a pleasing personality and appearance, along with a great deal of patience, to meet the daily requirements of the physical therapist.

And what about the training? Four years of college with a degree in physical therapy—followed by a period of supervised training in a clinic.

The physical therapist with JoAnne loves her work. After a busy day at the hospital, she likes to spend some of her “time-off” either sewing or knitting. She likes to cook, too.

Well this is it! It’s almost time to go. Her sister is here to help take her home. I’m meeting them here at their last stop—the hospital pharmacy. The pharmacist will give her the medicines the doctor has prescribed for her recovery.

The young man you see here has just completed the five-year college course that you need to become a pharmacist. He and the other members of the pharmacy’s staff fill the many orders prescribed by the doctors for outpatients of the hospital, as well as those who occupy some of the hospital’s over 1,000 beds. The pharmacist says that most of the drugs used now did not even exist a dozen years ago. The pharmacists often act as consultants to the doctors—they keep them informed of new developments in pharmacology. The hospital maintains an up-to-date reference library on thousands of drug compounds to assist the pharmacist. I wonder what kinds of new miracle drugs will be available in the 70’s?
The young man you see here has a deep interest in helping meet the health needs of patients, and he has the desire to share what he knows with others. His interest in science makes it easy for him to keep up with so many of the new discoveries in the field of medicine. He works well with people, too. That makes him a good member of the hospital team.

There can be no mistake when the pharmacist fills a prescription the doctor orders. He has to be accurate. A person’s life may depend on it.

As JoAnne, her sister, and I leave the pharmacy, I notice a broad smile on the young man’s face. Now, I remember—he told me earlier that he has his fishing gear all packed and ready to go. He and a pharmacist friend who works in a downtown drugstore know a spot where the fish are really biting. That gives me an idea—maybe CLOD would scan his memory banks and program me for some plain and fancy lake fishing, too—

Good-bye, ya’ll—

Closing theme music (tape).
HOSPITAL DIETITIAN
HOUSEKEEPER
LABORATORY TECHNOLOGIST & ASSISTANT
OCCUPATIONAL THERAPIST
PHYSICAL THERAPIST
# THERAPEUTIC DIETITIAN

The therapeutic dietitian (shown in Countdown to the 70’s) works directly with hospital patients who have special food needs.

<table>
<thead>
<tr>
<th>DUTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans normal and modified diets.</td>
</tr>
<tr>
<td>Plans menus to meet individual patient’s needs.</td>
</tr>
<tr>
<td>Confers with physicians about the patients’ food.</td>
</tr>
<tr>
<td>Visits patients to explain their food needs; teaches them how to prepare food when they leave the hospital.</td>
</tr>
<tr>
<td>Consults with various members of hospital staff concerning patients’ eating habits.</td>
</tr>
<tr>
<td>May work with patients in hospital clinic.</td>
</tr>
<tr>
<td>May supervise preparation of food.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enthusiasm for good food and a liking for cooking both as a science and an art.</td>
</tr>
<tr>
<td>An interest in people and ability to share knowledge.</td>
</tr>
<tr>
<td>An aptitude for chemistry and related sciences.</td>
</tr>
<tr>
<td>A genuine liking of people.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduation.</td>
</tr>
<tr>
<td>4 years college with degree in food nutrition or related subjects.</td>
</tr>
<tr>
<td>1-year dietetic internship.</td>
</tr>
<tr>
<td>Member of American Dietetic Association.</td>
</tr>
</tbody>
</table>
HOUSEKEEPER

The hospital housekeeper is a person who performs one or more of the many duties required to maintain the high standards of cleanliness demanded for a hospital.

The housekeeper may be the executive or administrative housekeeper who directs and is responsible for establishing standards, work methods and schedules; hiring and training housekeeping personnel; inspecting work; and other duties related to housekeeping.

The housekeeping supervisor (shown in Countdown to the 70's) checks the work of a specific group of housekeepers to see that conditions of cleanliness meet the hospital's standards.

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th>Neat appearance.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good health.</td>
</tr>
<tr>
<td></td>
<td>Willingness to perform a variety of tasks.</td>
</tr>
<tr>
<td></td>
<td>An appreciation for cleanliness.</td>
</tr>
<tr>
<td></td>
<td>Ability to work with others.</td>
</tr>
</tbody>
</table>

| TRAINING                     | Executive housekeeper—some hospitals require a degree (4 years college in institutional management); some require a combination of special education and practical experience. |
|------------------------------| Other positions on the housekeeping staff do not require specialized training. Many hospitals, however, provide on-the-job training. |
### MEDICAL LABORATORY ASSISTANT

The medical laboratory assistant performs certain simple routine tests and laboratory procedures under the direct supervision of the medical technologist or a pathologist or other qualified physicians.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th>Collects blood specimens.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Groups and types blood.</td>
</tr>
<tr>
<td></td>
<td>Prepares and stains slides for microorganisms.</td>
</tr>
<tr>
<td></td>
<td>Analyzes blood and body fluids for chemical makeup.</td>
</tr>
<tr>
<td></td>
<td>Examines body fluids under microscope.</td>
</tr>
<tr>
<td></td>
<td>May perform other duties—or may specialize in one area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th>An intensive interest in the sciences and mathematics.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ability to work well under supervision.</td>
</tr>
<tr>
<td></td>
<td>Eagerness to find out &quot;why&quot; when doing routine tests.</td>
</tr>
<tr>
<td></td>
<td>Ability to &quot;stick to the job&quot; for long periods of time.</td>
</tr>
<tr>
<td></td>
<td>Interest in finding out the cause of diseases.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
<th>High school graduation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-month training course in an approved hospital or laboratory school.</td>
</tr>
</tbody>
</table>

72
MEDICAL LABORATORY TECHNOLOGIST

The medical technologist performs a variety of laboratory tests and procedures and operates special laboratory equipment under the supervision of a physician.

| DUTIES | Counts blood cells.  
Performs blood groupings.  
Makes chemical tests of body fluids.  
Identifies microorganisms found in air, milk, water, and certain body materials.  
Operates special equipment and precision instruments.  
Cultures bacteria to find disease-causing organisms.  
(Technologists may perform other duties or may specialize in one area of technology, such as blood banking. |
| --- | --- |
| SOME PERSONAL QUALIFICATIONS | Aptitude and interest in physical and biological sciences.  
Precision, dependability, and sense of responsibility.  
Ability to use hands quickly and easily in handling delicate equipment.  
Normal vision.  
Ability to distinguish fine shades of color.  
Curiosity and willingness to work for long hours on one project. |
| TRAINING | High school graduation.  
At least 3 years of college.  
12 months of technical training in a school of medical technology approved by the American Medical Association. |
OCCUPATIONAL THERAPIST

The occupational therapist helps patients to cure themselves by "doing." He plans creative, educational, and recreational activities that may help the patient to get well.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th>Aids patients in mental and physical therapy. Works with doctors and other therapists in planning treatment. Learns about patients' likes and dislikes, abilities, etc. Decides on activity best suited to patient—such as weaving to strengthen stiff fingers. Works to arouse and keep the patients' interest.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOME PERSONAL QUALIFICATIONS</td>
<td>Warm, friendly personality. Ability to inspire trust and respect. A liking for and an interest in people. Imagination for planning and putting plans into action.</td>
</tr>
<tr>
<td>TRAINING</td>
<td>Graduation from high school. Four years of college training with degree in occupational therapy. Nine or ten months clinical training period.</td>
</tr>
</tbody>
</table>

74

67
**PHYSICAL THERAPIST**

The physical therapist helps in the rehabilitation of people with injuries or diseases affecting muscles, joints, nerves, and bones.

| DUTIES | Helps patients to overcome disability through proper exercise, massage, and the use of heat or cold.  
|        | Seeks to improve circulation, strengthen muscles, and encourage the return of motion.  
|        | Retrains patient to perform activities that would be done in daily life.  
|        | Helps patient to have the right mental attitude toward treatment he receives.  
|        | Teaches patients and families how to carry on treatment at home.  
| SOME PERSONAL QUALIFICATIONS | Good health and friendly personality; pleasant appearance.  
|                               | Ability to work easily with hands.  
|                               | Patience—especially when progress may seem slow.  
|                               | Unselfishness, understanding and enthusiasm.  
|                               | Ability to gain confidence of others.  
|                               | Ability to work with children.  
| TRAINING | High school graduation.  
|          | 4-year college course with degree in physical therapy—followed by a period of directed clinical experience. |
HOSPITAL PHARMACIST

The hospital pharmacist is custodian of the hospital's medical supplies, and he works with the doctors in filling the many prescriptions that are dispensed daily to the patients and out-patients.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knows and understands the chemical composition and properties of all drugs and how to compound medicines.</td>
<td></td>
</tr>
<tr>
<td>Fills prescriptions according to physician's orders.</td>
<td></td>
</tr>
<tr>
<td>Acts as consultant on drug problems.</td>
<td></td>
</tr>
<tr>
<td>Has responsibility for the production, storage, quality control, and distribution of medications and related products used in the prevention, diagnosis and treatment of illness.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest in helping to meet the health needs of patients.</td>
<td></td>
</tr>
<tr>
<td>Desire to share scientific knowledge with other members of the hospital staff.</td>
<td></td>
</tr>
<tr>
<td>Ability in management.</td>
<td></td>
</tr>
<tr>
<td>An interest in pharmaceutical and clinical research.</td>
<td></td>
</tr>
<tr>
<td>An aptitude for science.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduation.</td>
<td></td>
</tr>
<tr>
<td>Five-year training program in an approved school of pharmacy.</td>
<td></td>
</tr>
<tr>
<td>A one-year internship under a registered pharmacist required in some states.</td>
<td></td>
</tr>
</tbody>
</table>
COUNTDOWN TO THE 70's

Study Guide

Program 3: Careers in Public Health

Purpose The purpose of this program is to illustrate the functions of the following public health workers: doctor, public health nurse, health educator, sanitarian and sanitation assistant, and clinic aide.

Concept Highlighted The importance of health care has made the Public Health Service significant to the individual and the community. Rising standards of health for young and old people will increase the number of jobs in the 1970's.

Before the Telecast:
1. List the job titles of public health workers to be viewed and related vocabulary.
2. Collect pictures of workers.
3. Arrange a bulletin board including materials on public health.
4. Locate nearest public health clinic.

During the Telecast
The work of public health professionals and non-professionals will be demonstrated.

After the Telecast
Discussion:
1. Discuss the role of public health workers in the community. Why is their work needed?
2. What training is required for various jobs?

3. Are these people likely to be needed in the 1970's? Why?

4. How do you feel about these jobs? Which one was most interesting to you?

Related Vocabulary  (See Glossary for appropriate definitions)
chronic disease pollution sanitary
communicable environment preventive
community epidemic responsibility

Consultants

Arthur J. Arseneault, Jr., Secretary, Georgia Health Careers council.
Dorothy L. Barfield, Chief, Nursing Services, Georgia Department of Public Health.

Thomas F. Gibson, Director, Health Education and Training Service, Georgia Department of Public Health.

Mary Hayes, Project Consultant in Health Education, Georgia Department of Public Health.

Curtis F. Mewborn, Field Training Coordinator, Georgia Department of Public Health.

Jack B. Sartain, Director, Department of Program Planning and Health Education, DeKalb County Department of Public Health.

Aleise A. Sockell, Office of Local Health Coordinator in Public Health Nursing, Georgia Department of Public Health.

Pat Yarbrough, Health Educator, Georgia Department of Public Health.
Teacher: Ainsley Deutsch
Director: Bill Scott

Show Title: Public Health Team

VIDEO

Titles
Unit set—AD is seated comfortably in an armchair, and he is reading. CLOD begins blinking furiously.

AUDIO

“Countdown to the 70’s” (Tape)

CLOD: (Audio cue: characteristic CLOD sounds.) Chief, you look mighty comfortable there. No danger of you ever blowing your gasket with overwork. You are programmed to speak today on the Public Health Team, or have you forgotten?

AD: No, I haven’t forgotten, CLOD. The field of public health is very much like a detective story, and that’s what you caught me reading. *Microbe Hunters* by Paul DeKruif was written about a rare breed of scientists who did so much for mankind in the field of public health. The first of the microbe hunters, Anthony Leeuwenhock, a Dutchman who lived 300 years ago, invented the microscope...followed by a young Italian, Lozarro Spallanzani, who discovered the mysterious world of microbes or germs. And then the Frenchman, Louis Pasteur, who made a major breakthrough in the field of immunization (shots). Among his other important discoveries was the cure for rabies, which in those days meant certain death. I could go on. And Walter Reed, the famous American who was a pioneer in the field of public health. His war against the Stegomia Mosquito controlled the dreaded yellowjack—"yellow fever." It took years of detective work on the part of dedicated scientists to discover ways...
of controlling diseases that used to wipe out whole populations. It's rare these days that you ever hear of a case of smallpox, typhoid fever, or diptheria—all killer diseases of yesteryear. When I was a boy, polio or infantile paralysis meant certain crippling; and today, with the Salk vaccine, this dread crippler is under control. It's because of these medical advances that the world's population has been growing at such rapid rate.

Here are some interesting statistics that CLOD came up with that will be of help. There are three and a third billion people in the world today. And when you're my age, that figure will double. Seven out of every ten Americans now live in the cities on less than one percent of the land.

Very interesting, CLOD, but what does it mean? Give me a hint.

Oh, I get it. You're talking about the population explosion. The fact that more of us are living closer together means that public health becomes more and more important.

One expert said, "Public Health is the art and the science of preventing disease, prolonging life, and promoting health in our community." We're going to be looking in on an excellent county health department today. But we will only be able to look in on the public health nurse, the sanitarian and sanitation assistant, the health educator, public health doctor, and the clinic aide.

Well, CLOD, I think I'm just about ready to get in the front line of the public health battle. I'm ready to get out in the field—so if you would, start teletransportation.
After teletransportation, AD finds himself again seated at his easy chair, doing a "slow burn."

Film starts and focuses on the public health nurse.

This is the public health nurse. Public health nurses make up the largest group on the public health team, and the entire community is her territory. The public health nurse is a registered nurse who specializes in public health. She's well known. First of all, as a skilled nurse; secondly, as an excellent teacher of health, a good counselor and guide. She is the first person people may turn to in matters pertaining to health; but above all, she is a good friend. She is the warm, human expression of the community's concern for the health of its citizens. Let's try to keep pace with the public health nurse on what may be a typical day for her, and I hope your energy level is high. Here the public health nurse is scheduled to visit a mother who has recently been to the public health clinic. This is a follow-up visit, and you will notice that this mother opens her home to the public health nurse with enthusiasm and a great deal of hospitality. She knows that the public health nurse is concerned not only with the care of the sick, but also to a large extent with the prevention of illness. This is going to be largely a teaching session in which the public health nurse will be discussing such matters as baby care and feeding. This young lady's duties carry her from homes where very little is known about cleanliness and sanitation on the one hand and to a home like this one which is spic and span. But nevertheless, this public health nurse...
takes certain routine precautions. That kitchen’s as clean as an operating room. I notice there she disposed of her paper wash cloth in her little sack.

This little lady is busy relaxing, and she couldn’t care less right now about what’s going to take place. The public health nurse is going to instruct this mother on the use of a high protein cereal. A well-balanced diet is essential to all of us, but particularly to a child of this age. This young baby’s body craves protein at a time when brain tissue is developing. The public health nurse must not only like people (and you can see by the way she goes about her duties that she does), but she’s got to like people well enough to help them over times of stress. She’s got to like them well enough to gain satisfaction from helping them even when rewards are not evident. She’s got to like people well enough to take care of all kinds of people of all ages and in all stages of illness or injury.

This visit was filmed shortly before school started, and the mother of this family wants to get her children ready for school. When this young man came to the clinic with poison ivy, the public health doctor prescribed a course of treatment which included some ointments; and this future scholar doesn’t mind showing the public nurse how well his skin has healed. She gives his younger brother a quick once-over to make sure that he won’t feel left out. The public health nurse has asked this mother to bring her children into the health clinic. There are six shots that are now required before a child can enter school in this state. So almost every child will come to the health center sometime before he enters the first grade. I somehow get the distinct feeling that this young lady just loves her work, don’t you?
The public health nurse bridges the gap between the patient’s stay at the hospital and his return home. Here the public health nurse will be visiting the family of a man who has suffered from a stroke. It has left him paralyzed on the right side of his body. This family is fortunate in that they have a licensed practical nurse to help out. Here she and the licensed practical nurse are going over the patient’s record. Notice, here again, how the public health nurse is able to get everyone to work with her.

The public health nurse is the doctor’s right-hand man, and here she will be teaching the stroke victim’s wife the technique of giving her husband certain exercises which are designed to bring back some control to the paralyzed arm. Not only will this make the patient feel better, but I think that it’s going to make his wife feel better in that she will know that she is helping her husband on the road to recovery. It will make her feel needed. I don’t know if this public health nurse uses good psychology or just good old common horse sense. I think it’s a combination of both.

Here at the bedside of the stroke patient the public health nurse and the licensed practical nurse are discussing and demonstrating certain techniques in managing the patient. Range of motion exercises are designed to strengthen the affected limb. To bring a patient back to normal so that he can become a contributing member of the family, these exercises are necessary. Recommended exercises, massage techniques and other forms of therapy are taught here to make the patient’s lot more bearable and to move him along to recovery and rehabilitation.

Her visit is complete, and her cheerful presence, her skill in nursing, and her knowledge of stroke treatment all have brightened this person’s day. Knowing that this member
Camera on public health nurse teaching.

Camera shows trash pile and Sanitarian No. 1 appears.

of the community health team is available certainly makes this woman know that she is not alone and that the community does care.

As we have mentioned before, teaching is a very important part of the public health nurse's job. She may be called on to teach in the public schools, but here you see her teaching a course to expectant mothers or women who are merely interested in child care. A program that yields lasting returns in terms of benefits to the community is the maternal program—or you might say, the course in baby care. Proper care while the young mother is carrying the child is of vital importance in producing a normal child. Such matters as diet, weight, exercise, and the counseling program to eliminate worry are of extreme importance. This public health nurse also includes as part of the maternal program information about family planning.

Our alert public health nurse made a note of this unsanitary situation, and she called the division of environmental health and asked that an investigation be made. This sanitarian promptly responded, and he has with him a detail of men to cope with this situation. The sanitarian must be a college graduate with work in biology, physics, chemistry, mathematics; and he must be registered to practice as a professional sanitarian in this state. He must be able to supervise the work of other specialized workers in sanitation programs and provide advice and guidance in this field. He is required to daily supervise the programs of food service, insect and rodent control and the sanitation aspects of nursing homes, kindergartens, and day-care centers. He makes periodic inspections of food service establishments while they are operating. He is responsible for approving or
denying permits and will start legal action where unsanitary conditions exist. This is only a sampling of his responsibilities. This man is a detective, a health detective, who makes sure that we can be safe from disease and that we can live healthy lives.

The sanitarian calls in the sanitation assistant who sprays this pile of debris with an insecticide, but this will not be the end of it. The property owner will be informed that he had an unsatisfactory condition and that this mess must be cleaned up, and the sanitarian will stay with this until the job is done.

The sanitation assistant has two men working with him, and these are sanitation aides. This untidy situation prompts the sanitation team to investigate the premises for other possible health hazards. What they're doing now is that the sanitation assistant who acts as crew chief is instructing the sanitation aides in the placement of rat poison—baiting the area in an attempt to control rats.

This is a sanitarian, and here you see him making an inspection of a dwelling for compliance with the county housing code. He does what is necessary to make sure that the owner corrects those situations that he reports. He is also concerned with the control of the environment in which we live. By environment, I mean our surroundings, and this includes clean air, clean water, safe milk, refuse free yards and fields. He is concerned with properly planned housing, properly designed and installed sewage disposal systems. His job includes checking on the safety of the surroundings in which the citizens of the county work. He is concerned with the protection of our food, and all of these are part of the program of the division of environmental health.
Here we see the sanitation aides operating a fogging machine on the back of this pick-up truck, which is loaded with insecticide to kill off the mosquitoes. Situations like this, in general, are a blight on our community; and we should not tolerate them. This is certainly a sorry contrast to the neat and pleasant surroundings we saw before.

The position of the public health educator is relatively new. Here you see the public health educator teaching the course to people who have diabetes, a serious disease; but with the proper instructions in diet, medication, and exercise these people will be receiving, they will be able to manage their lives so that they can live normally. The ability to communicate with all kinds of people at all levels is very important. When you do this kind of teaching, you've got to get through. To prepare for this field, one should have the regular four-year college course with a strong emphasis in the sciences. If you plan to go places in this profession, you should plan on a master's degree in public health. The public health educator will act as a consultant for other members of the health team regarding health education aids and teaching techniques. He must keep abreast of developments in the field of public health education. He must know how to deal tactfully with the public and communicate effectively.

Health departments are under the direction of a physician who is certified in preventive medicine. The director shown on the right is responsible for this county's excellent health program. The administrative officer on the left is particularly important. He runs the business end of the department. The administrative officers have specialized training in administration in the health field. Here the high level officers of the health department are discussing the plans for their new health science plaza which will house the
Clinic aide and public health physician are shown on film.

Public health nurse enters.

Credits supered over closing film.

expanded activities of this aggressive health department. Much thought and experience of the directors and the divisions of this department went into the planning of this health education center. It will be a model for other communities.

This is typical of a neighborhood public health clinic, and it might look familiar to many of you. The clinic aide assists with the many duties that are done in the clinic. She must be a high school graduate and at least 18 years old. She receives her training on the job under the supervision of doctors and nurses. The clinic aide helps wherever she is needed, and these duties may require her to do some filing from time to time. She has a cheerful and pleasant manner, which is very reassuring to the people who come to the clinic.

Here's a familiar face—our public health nurse, who is still going at it strong. Working in the clinic is also part of her job. This is a public health physician, and her field is maternal and child health, the school health program, and the communicable disease control program. In the child clinic, she makes medical diagnoses and recommends courses of treatment. Working at this clinic and supervising the programs that are under her direction really keep her on the move. Among the people she would treat besides children are expectant mothers who come to the clinic, and she may act as a consultant to their health clinics in the county. The health clinic is the business end of the health department, and most of us would be familiar with the activities of the department through this clinic.

This clinic aide says this is the best way she could play an important part in a community wide health program.

Closing theme music (tape).
HEALTH EDUCATOR
SANITATION ASSISTANT
PUBLIC HEALTH PHYSICIAN

The public health physician (as shown in Countdown to the 70's) is a medical doctor who serves as assistant director of the county health department.

| DUTIES | Has special duties connected with the organization, planning, and work of the following health department programs:
|        | 1. Program for mothers.
|        | 2. Child health program.
|        | 3. School health program.
|        | 4. Dental health.
|        | 5. Communicable disease program. |

| SOME PERSONAL QUALIFICATIONS | Knowledge of the principles and practices of modern medicine. Knowledge of practices and law relating to public health. Ability to work with and supervise others. Ability to use good judgment and make decisions. Ability to plan work well and to tell others how to follow plans. |

| TRAINING | High school graduate. 4 years of premedical training. 4 years of medical college. 1 or 2 years as an intern in an approved hospital. |
## PUBLIC HEALTH NURSE

The public health nurse is a registered professional nurse. She works in the community to prevent illness as well as to care for the ill. She is employed by county or state health departments.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goes into homes, schools, clinics, commerce and industry.</td>
<td>Gears first aid treatment.</td>
</tr>
<tr>
<td>Provides nursing care as prescribed by a physician.</td>
<td>Makes arrangements for immunizing patients.</td>
</tr>
<tr>
<td>Educates patients and their families about health problems.</td>
<td>Teaches ways and methods of preventing disease.</td>
</tr>
<tr>
<td>May perform other duties.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of public health nursing and community needs.</td>
<td>A strong desire to help others.</td>
</tr>
<tr>
<td>A willingness to work under unpleasant conditions with many</td>
<td>Common sense and a sense of responsibility</td>
</tr>
<tr>
<td>types of people.</td>
<td>A willingness to work under unpleasant conditions with many</td>
</tr>
<tr>
<td>An alert mind and good health.</td>
<td>types of people.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Graduation from college with degree in nursing which includes a</td>
<td>Graduation from a state approved school of nursing and two</td>
</tr>
<tr>
<td>program in nursing for beginning public health nursing</td>
<td>years experience in public health nursing under supervision.</td>
</tr>
<tr>
<td>positions.</td>
<td></td>
</tr>
</tbody>
</table>
### PUBLIC HEALTH EDUCATOR

The public health educator teaches people how to care for and maintain their personal health. He also tries to interest people in programs that are planned to improve community health.

| DUTIES | Helps in organizing and conducting study groups, school health programs, special project groups and training programs. |
|        | Prepares and assembles necessary materials for exhibits for special public health programs. |
|        | Writes or publishes booklets, bulletins, etc., about current literature in Public Health. |
|        | Works with state and local officials in the field of public health education. |
|        | Other duties may or may not be included. |

| SOME PERSONAL QUALIFICATIONS | Knowledge of new developments in the field of public health education. |
|                             | An interest in public health conditions and a desire to help others learn how to control their health problems. |
|                             | Ability to talk to people so that they can easily understand. |
|                             | Ability to work well with people. |

| TRAINING | High school graduate. |
|          | Four years of college. |
|          | Graduation from a school of Public Health with a Master's Degree in Public Health Education (1 or 2 years). |
SANITARIAN

The public health sanitarian performs duties that are concerned with the inspection and removal of health hazards in order to make the physical environment safe for everyone.

In Countdown to the 70's, the first sanitarian pictured was in charge of supervising programs of food service, insect and rodent control, the sanitation aspects in nursing homes, kindergarten and day care centers. The second sanitarian pictured was responsible for inspecting various types of housing.

DUTIES

May include some of the following:

Directs or takes part in inspection of all food handling establishments.

Directs program of insect and rodent control; supervises operation; identifies insects and rodents; selects types of equipment and insecticide to use; checks reports and need for follow-up activity.

Directs program of sanitation inspection of nursing homes, kindergartens, and day care centers.

Takes part in investigation of reported cases of communicable diseases.

Assists in all phases of environmental sanitation when the need arises.

Promotes public interest in various phases of the local sanitation program.

Informs public of value of sound sanitation.

Inspects dwellings in assigned areas to determine if they meet housing code standards.

Inspects for such things as faulty wiring, unsound structure, or any existing hazards.
Requests owners to comply with standards of building code; allows time for cooperation.

Appears at formal hearing—or court—along with other housing inspectors.

Numerous other duties included under the title—sanitarian.

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of principles of environmental sanitation.</td>
</tr>
<tr>
<td>Skill in applying techniques employed in sanitation and investigation.</td>
</tr>
<tr>
<td>Ability to meet and work well with others.</td>
</tr>
<tr>
<td>Ability to understand and interpret plans, reports, etc.</td>
</tr>
<tr>
<td>Ability in organization and management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduation.</td>
</tr>
<tr>
<td>4-year college course with 40-quarter hours in science.</td>
</tr>
<tr>
<td>Georgia Department of Public Health Training Program.</td>
</tr>
</tbody>
</table>
SANITATION ASSISTANT

A sanitation assistant aids public health sanitarians in the inspection of residences, commercial buildings, or institutions to see that they comply with regulations and ordinances.

| DUTIES | Inspects food service establishments, schools, kindergartens, tourist courts, swimming pools, and trailer parks for sanitation and safety.  
|        | Inspects sanitary facilities in various types of housing.  
|        | Takes water and milk samples for analysis.  
|        | Inspects for rats and takes necessary steps for rodent control.  
|        | Performs any of the various duties that may be required by his supervisors. |

| SOME PERSONAL QUALIFICATIONS | Ability to investigate and to keep accurate records.  
|                             | Ability to meet and deal with the public.  
|                             | Ability to use judgment in acting on matters that can be decided or acted upon by him.  
|                             | 18 years of age. |

| TRAINING | High school graduate.  
|          | On-the-job training—length may vary with work location. |
# CLINIC AIDE

The clinic aide assists physicians, nurses, and other personnel in the various clinics of the health department.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th>Helps wherever she is needed in one or more of the clinics. May prepare babies or children for examination by physician. May help nurses with immunizations. May also perform routine office duties—such as filing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOME PERSONAL QUALIFICATIONS</td>
<td>A real liking for people. A willingness to work at various tasks with all kinds of sick people. Ability to cooperate with supervisors. A desire to help those who are sick. Must be 18 years old.</td>
</tr>
<tr>
<td>TRAINING</td>
<td>High school graduate. On-the-job training under supervision.</td>
</tr>
</tbody>
</table>
SIXTH GRADE CLASS AT ED S. COOK SCHOOL VIEW PROGRAM ON BANKING

Related vocabulary is written on chalkboard
Dental Health Team
Program 4: The Dental Health Team

Purpose  The purpose of the program is to demonstrate the activities of various members of the dental health team, including the dentist, dental assistant, dental laboratory technologist, and dental hygienist.

Concept Highlighted  Dental health is a field which offers lifetime opportunity and satisfying work to well-qualified professional people.

Before the Telecast
1. List members of the dental health team and related vocabulary.
2. Collect pictures of workers and equipment with which they work; arrange a display.

During the Telecast
The work of several different members of the dental health team will be discussed and illustrated.

After the Telecast
Discussion:
1. Discuss the work of the dental health team. What were these people actually doing on the job?
2. What similarities did you see in their work? What differences?
3. Are these workers likely to be needed ten years from now? What makes you think so?
4. What kinds of training do you think these people must have? How do you feel about their work?
5. What are some aspects of their work that you would like? What would you not like?

Activity:

1. Read supplementary book and report to class.

Related Vocabulary  (See Glossary for appropriate definitions)

<table>
<thead>
<tr>
<th>bridge</th>
<th>denture</th>
<th>filling</th>
<th>oral</th>
</tr>
</thead>
<tbody>
<tr>
<td>crown</td>
<td>examine</td>
<td>job</td>
<td></td>
</tr>
<tr>
<td>decay</td>
<td>extract</td>
<td>medication</td>
<td></td>
</tr>
</tbody>
</table>

Supplementary Materials

Books:


Consultants

Dr. Lawrence F. Golsen, Chairman, Dental Health Committee, Northern District Dental Society.

James A. Nicholson, Atlanta Area Technical School.

Dr. Maurice Washburn, Atlanta Area Technical School.
“Countdown to the 70’s” (Tape)

CLOD and I will only have time to go into one more area in the health career field, and that is dental health. That will just about round out our sequence in this particular job family.

The dentist we will visit today has spoken to me about some of the exciting new things that are taking place in this field. It may be possible, for example, in the 1970’s that a vaccine will be used to prevent or at least slow down the likelihood of tooth decay. Also, they are doing research with a mouthwash that will dissolve or get rid of the scaly deposits or tartar on the teeth. Tooth transplants are already a reality. The dental profession envisions tooth banks, similar to the blood banks we have already seen, where real teeth may be implanted in the dental arches. They are thinking of an electronic computer—CLOD, did you hear that?—that will assist in the detection of dental problems and the planning of treatment. All of this is a far cry from the time when dentists did not even have to go to school to learn their trade. They didn’t have to be licensed. They could put out a shingle like this—Doctor Perry Donta!—and start practicing. The father of our country, George Washington, who, incidentally, was a
very rich man and could afford the best in dental care, wore false teeth. These teeth look very much like this. We know that he didn’t have a single tooth in his head, because these are full upper and lower plates. They were made of wood and porcelain, and they were held in place by a steel spring that held them up against the roof of the mouth. So he would have to overpower the force of the spring in order to chew, and he would have to keep his mouth clamped at other times. While we are talking about history, soldiers throughout history did their own dentistry. If an infected tooth got to hurting too badly, they would pry it out with the tips of their bayonets. These are interesting acts of history, but we must move along. Oh yes! I checked out a number of pliers from my shop at home, and these are mechanics’ tools; but crude as they are, in the 19th century a dentist would have been pleased to have them. You might say he would have given his eyeteeth for pliers like these. Enough of this corn, if we are to see how dentistry will be practiced in the years to come. So, CLOD, let’s have a little traveling music.

(Countdown to the 70’s theme)

(Narration starts)

This is Beth Blake who has come to the dentist’s office on one of her routine visits. Her mother sees to it that she goes to the dentist at least twice a year so that if cavities should develop, they could be dealt with right then.

The dentist is the most important member of the dental team. The dentist’s education is very much like that of the physician. The modern dentist is always interested in the patient’s general health as well as the condition of his mouth. He can spot symptoms which might call for further attention and work closely with the family doctor to correct trouble. Dentists not only take care of the teeth, gums, and mouth;
but as members of the healing profession, they recognize that diseased teeth and gums can affect general health, especially the digestive system.

As it so happens, Beth has a small cavity that will require filling. The dentist prepares Beth's gums because he will have some drilling to do; and aside from just a quick sting, filling this cavity will be completely painless. Beth is completely at ease in the chair. If you will notice the hypodermic needle, which the dentist is about to use on Beth, is passed below her face so that she does not even see the delicate tools that are used in her mouth. She did not even wince, and in a few minutes the child's gum will be deadened to pain and the dentist can work a lot more efficiently.

Dental problems affect a person's appearance; good dental health not only improves the physical well-being of a person but also the personality of an individual. For example, I am sure that all of you have known someone who was afraid to smile because he had some teeth missing or had generally unattractive teeth.

A dentist must complete from 2 to 4 years of pre-dental college work with an excellent record, since admission to dental schools is so competitive. You see, there are only a little more than 50 dental schools in the United States. However, this situation is expected to improve by the mid-seventies.

The dentist is perhaps the best known of all the health workers; and the need for dentists, since they are in such a short supply, is very great. This will continue into the foreseeable future, certainly beyond the middle 70's. There are many people who have been to the dentist many times and yet have never been to a doctor, and so it is the dentist who is one of the key health workers. He can spot trouble not
directly related to dental problems and refer the patient to other medical specialists. The dentist's job has two important features. The first one we know about—that is, treatment of problems related to the teeth and the gums. But the second area is the prevention of these problems. The modern dentist feels that his responsibility to educate people to take care of their teeth and gums is very important. And on the preventive side he works along with the school nurse and the clinical health departments.

What are the most important personal qualifications that you think a good dentist should have? Don't you think that the desire to serve others would be important? The desire to heal and relieve pain? He should have the desire to meet new challenges—no two mouths are the same, any more than any two people are the same. I would also say he has got to like people, enjoy working with them, and be tolerant enough to understand and sympathize with their problems. Aside from the tough years of instruction and the long road you travel to become a licensed accredited dentist, once you become one, the work is not easy. The hours are long and very often very irregular. On the other hand, since most dentists are in private practice (that is, they have their own offices), they can pretty well set their own working hours. All told, it is a highly respected profession.

As you have been able to see for yourself, a dentist must have perfect vision, or at least vision that can be corrected with glasses, and manual dexterity—that is, the ability to work swiftly and deftly with his hands.

This young lady is the dental assistant. She is the dentist's "right-hand" girl, and she is another member of this important health team.
Today's busy dentists need one or more dental assistants, and a new career has come into being that many young women will find interesting and satisfying.

Most dental assistants work for an individual dentist or in a clinic or hospital or other health agency. The dental assistant needs a pleasant disposition. In this profession, it is important that she like people and that the patients like her.

For example, if a dentist specializes in treating children, then the dental assistant should have a special talent for getting along with children. Like the dentist, good vision, good health, and skill in working with her hands are essential. She must be able to take responsibility and follow through. Carelessness in sterilizing instruments could be a serious mistake.

Working conditions for the dental assistant are usually very pleasant. She is respected as a member of a professional team. It is not at all unusual for a dental assistant to stay on for many years with the same dentist and feel that she is needed by him and his patients.

When a patient visits the dentist, it is the dental assistant's job to make him feel welcome, make him comfortable, and get him ready for the examination or treatment or surgery. It is her job to see that the instruments are sterilized and ready, and she helps the dentist when the patient is in the dental chair. She is responsible for keeping the operating room orderly and the needed supplies always at hand. In some offices, she will assist with the preparation of solutions, the mixing of cement and other types of fillings. She assists the dentist in taking and preparing X rays.

And if that is not enough, she answers the telephone, makes appointments, handles business transactions, keeps patients' records, sends out monthly bills, maintains tax records, and does other secretarial jobs.
Film shows Dental Hygienist

Hygienist is seen working with patient.

Don’t ask me what she does in her spare time.

The dental hygienist is a member of a profession that offers a special satisfaction that comes from being a respected member of the dental health team.

Just a generation ago, the profession of dental hygiene was unheard of; yet today the hygienist is one of the key figures in promoting better mouth care.

The dental hygienist is the only one, other than the dentist, who works directly in the patient’s mouth. She must have a state license to practice. She works with the dentist, cleaning and polishing teeth, taking and processing (developing) X rays for the dentist’s diagnosis, and instructing the patient in the correct care of teeth. Many grown-ups have not been fortunate enough to have been taught good dental hygiene when they went to school; and this is an important part of her job in the dentist’s office. So she, too, stresses the prevention aspects of dental care.

The radiograph, or X ray, is made. This man is a new patient and knows that he is to be fitted with a bridge, or artificial teeth.

Like the dentist, the dental hygienist must have excellent eyesight and the ability to work well with her hands. As you can see, she works with delicate tools in a very small area—the mouth—and she has to be exact as well as gentle. Cleanliness, neatness, good general and dental health, patience, understanding and a liking for people are needed for this work.

To become a dental hygienist, a person should have a high school diploma with a good bit of science. Then you can take a two-year professional training course at an approved school of dental hygiene and graduate with a certificate in dental hygiene; or you can take the four-year program, which
also includes two years of regular college work. You get a degree with a major in dental hygiene. In either case, both have to pass a state examination before they can become an R.D.H. or registered dental hygienist.

The dentist is ready to examine the patient who is to be fitted with a bridge. Some time has passed, and the radiographs (X rays) have been developed and are ready for the dentist. He tells the hygienist to make some notes on the patient's dental record. The dentist explains to the patient just what he can expect and why the bridge is necessary. We are fortunate today; for if we lost a tooth, or teeth, they can be replaced. Of course, they are never quite as good as the ones nature gives us. The bridge is necessary to prevent the other teeth from slowly shifting and they will help the patient to chew better. A mold—like this one—and a prescription will have to be made by the dentist so the technicians can make the bridge.

The dental hygienist has a bright future in dentistry. The emphasis in dentistry is placed on the prevention of mouth troubles, not just on their treatment. The dental hygienist—with her cleaning techniques, demonstration of proper dental care, talks on diet and nutrition—will take on greater importance in the fight against one of man's most common diseases, dental disease.

This is the last patient of the day, and this hygienist is looking forward to a relaxing evening with her husband who is to meet her in town for dinner, and then both of them plan to attend the symphony concert at the Civic Center.

The dental laboratory technician is a highly skilled worker who makes dentures, teeth, crowns, bridges, and other dental appliances, all of which are called restorations. The dental laboratory technician rarely, perhaps never, meets
the people for whom his work is intended. Yet, his work is of
great importance to the appearance and comfort of the
patients. It is his job to make and repair dental appliances
under the direction of the dentist, following the prescriptions
and the instructions that the dentist has written down for
him. He works with plaster, metals, porcelain, plastics, and
other materials, using small hand tools, electric lathes, drills,
high heat furnaces, and other kinds of special laboratory
equipment. This work requires exacting skill, but it pro-
vides the laboratory technician with a satisfaction in knowing
that he has produced something that meets high standards
and will become part of the human body of the user.

The things that he makes are very complicated mecha-
nisms that help people to eat, to look better, to have better
health, better comfort, and better speech.

The dental laboratory technician is a fairly new occupa-
tion. Not too long ago, dentists made their own restorations—
that is, dentures and appliances—and made repairs themselves.
But we are going into more and more specialization, and
the dentist with all of his vast amount of training had best
concentrate on the prevention and treatment of dental
disease.

Much of the special equipment used in the laboratories
was invented by dental laboratory technicians themselves.
If you have any idea that you would like to do this kind of
work, you ought to make sure that you have certain basic
qualifications. Since you will work with delicate tools and
materials, you ought to have hands which can be trained to
be skillful. An artistic eye will be helpful. You will have to
match very fine shadings for color in teeth. You should have
lots of patience and an ability to follow instructions exactly
and to work toward absolute accuracy. Being a dental labora-
Camera continues to focus on the dental technician.

tory technician is not hard work physically, but there are times when you are under pressure to get work out quickly. On the whole, a dental laboratory is a very calm place to work.

To be a dental laboratory technologist, you have to have a high school diploma. If you take art, mechanical drawing, and shop and some science, these will be very helpful.

Some area technical schools give formal training in dental laboratory technology, and the course takes two years. A few dental colleges offer courses in laboratory technology. There are many people who have learned their skill as an apprentice in a dental laboratory. This on-the-job training will take a considerable amount of time before you will be skillful enough to become a good craftsman. The best way to prepare for a career in this field would be through formal training in a program approved by the American Dental Association.

You may be interested in knowing that almost all dental laboratories today are owned and operated by former dental technologists. Advancement in this field is usually a matter of becoming more and more skilled, so that the technician can handle more responsible jobs. Some ambitious and gifted laboratory technologists are likely to go into business for themselves, and the incomes of these persons naturally will be more than those employed in a laboratory.

Locating a laboratory is fairly important, and the majority are located in the larger cities. As the population continues to grow and knowledge of the importance of dental health spreads, there will be more work and more job openings for qualified people—not only in the dental laboratory work but also in all areas of the dental field.
Here, a dental technician is carefully wrapping up the finished work for shipment back to the dentist who ordered it. And I suppose this would be a good point for me to wrap up our visit to the dental health field of the 70's. See you soon!

Closing theme music, "Countdown to the 70's." (Tape)
DENTAL HYGIENIST
DENTAL ASSISTANT
DENTAL TECHNOLOGIST
**DENTIST**

A dentist works in a patient's mouth to preserve teeth, to repair partially destroyed teeth, and to replace lost teeth.

| **DUTIES**          | Fills cavities; treats infected gum tissues; extracts teeth.  
|                    | Takes impressions for dentures and sometimes (rarely) makes dentures.  
|                    | Does surgical operations on jaw or mouth.  
|                    | Works with many types of materials—cement, porcelain, silver, etc.  
|                    | Sometimes applies corrective braces to straighten teeth.  
|                    | Takes, develops, and interprets x-rays.  
|                    | Fits and adjusts all types of artificial teeth, bridges, or dentures.  

| **SOME PERSONAL QUALIFICATIONS** | Good student (throughout life).  
|                                  | Ability to communicate thoughts as he works with people; courtesy, understanding, and a friendly attitude.  
|                                  | Ability to concentrate on his work; good health and good vision.  
|                                  | Steady hands and nerves; ability to work easily with hands.  

| **TRAINING** | High school graduate.  
|             | 2 or 3 years of pre-dental college training.  
|             | 4 years training in a professional school of dentistry.  

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DENTAL HYGIENIST

The dental hygienist assists members of the dental profession in providing oral health care. Besides the dentist, she is the only person who is licensed to work directly in patient’s mouth.

| DUTIES | Scales and polishes teeth; examines and charts defects.  
Gives instructions in home care of the teeth, including instruction in methods of tooth brushing and discussion about diet and nutrition.  
Takes and develops x-ray films.  
Applies medication for reduction of dental decay and takes other preventive measures. |
| --- | --- |
| SOME PERSONAL QUALIFICATIONS | Ability and desire to work and get along well with patients.  
An interest in health problems of people and in their general welfare.  
Willingness to work with all kinds of patients.  
Excellent general and dental health.  
Good degree of finger and hand movement.  
Ability to stand on feet for long periods of time. |
| TRAINING | High school graduation.  
Two-year approved course in a technical school or school of dental hygiene.  
Four years of college, including two years of college training and two years of professional training. |
DENTAL ASSISTANT

The dental assistant assists the dentist as he works with patients, and she usually acts as a receptionist in the dentist's office.

<table>
<thead>
<tr>
<th>DUTIES</th>
<th>In operating room:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Seats and places clean napkin on patient, adjusts chair.</td>
</tr>
<tr>
<td></td>
<td>Hands instruments to dentist; mixes cement or other materials for fillings; prepares various solutions and mouth washes.</td>
</tr>
<tr>
<td></td>
<td>Develops x-rays for dentist; sterilizes instruments.</td>
</tr>
<tr>
<td></td>
<td>Other duties may be included.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Receptionist:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greets patients; records necessary information; makes appointments.</td>
</tr>
<tr>
<td>Answers telephone; keeps records; performs necessary secretarial duties.</td>
</tr>
<tr>
<td>Orders supplies; takes care of laundry; deals with equipment salesmen.</td>
</tr>
<tr>
<td>Other possible duties.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SOME PERSONAL QUALIFICATIONS</th>
<th>Poise, self-control, ability to assume responsibility.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Happy, friendly disposition; alert, accurate, active.</td>
</tr>
<tr>
<td></td>
<td>Ability to work under pressure; a genuine liking for people.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAINING</th>
<th>High school graduation.</th>
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<tbody>
<tr>
<td></td>
<td>One-year approved program in a technical or private school.</td>
</tr>
<tr>
<td></td>
<td>On-the-job training.</td>
</tr>
</tbody>
</table>
The dental laboratory technologist is a highly skilled worker who makes dentures, teeth, crowns, bridges, and other dental appliances.

| DUTIES | Follows dentist’s instructions in his work. |
|        | Forms models from the impressions of patients’ mouths taken by dentists. |
|        | Makes metal castings for dentures and metal bridges. |
|        | Polishes and finishes dentures. |
|        | Constructs metal or porcelain crowns or inlays for partially destroyed teeth. |
|        | Performs other duties in connection with producing finished laboratory work for the mouth. |

| SOME PERSONAL QUALIFICATIONS | Ability to use small handtools, special electric lathes and drills, high-heat furnaces, and other specialized equipment. |
|                             | Patience and a liking for detailed work; artistic ability and good color perception. |
|                             | Ability to work quickly and easily with hands. |
|                             | Ability to follow instructions and to work at a bench for long hours. |

| TRAINING | High school graduation. |
|          | 2-year approved training program at a technical school. |
|          | 1-2 year programs at private schools. |
|          | On-the-job training—3 to 4 years. |

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GLOSSARY

The words which were suggested as related vocabulary for each program are defined in this glossary. You may, of course, wish to modify the definitions for your pupils.

Definitions were adapted from the following:


academic—of, relating to, or associated with an academy or school, especially of higher learning; of or relating to literary or art rather than technical or professional studies.

account—a statement of money received and paid out; a record of business.

Addressograph—a machine for printing addresses automatically. (Begins with capital letter because it is a trademark.)

advertise—to give public notice of in newspapers, over the radio, by television, etc.

aircraft—a machine designed for navigation in the air and to be supported by air.

allocate—to assign a share; to distribute.

alloy—a mixture of two or more metals or a metal and some other substance.

apparatus—a set of materials or equipment designed for a particular use; anything necessary to carry out a purpose.

apparel—clothing; dress.

assemble—to fit together the parts of something.

assignment—a post or duty to which one is appointed; a piece of work to be done.

attendance—attending; the number of times a person attends or is present.

balance—an amount in excess, especially on the credit side of an account.

bridge—partial denture attached to adjacent teeth.

budget—a plan for spending and saving.
cable—a protected bundle of wires to carry an electric current, or a group of such conductors insulated from one another.
cash—money, or something that equals money, such as a check, paid at the time of buying something.
catalog—a list of items in some collection, either identifying each item very briefly or describing it more fully.
charge—to have the price of a purchase deferred for later payment.
check—a written order directing a bank to pay money as instructed.
checkbook—a book containing blank checks on a bank.
chronic—continuing a long time; marked by long duration or frequent recurrence.
circuit—the complete path over which an electric current flows.
clerical—of or relating to a clerk or office worker.
communicable—capable of being communicated; transmittable; as a communicable disease.
community—the people of any district; a group of people living together.
component—an essential part; ingredient.
computer—a mechanical, electrical, or electronic device for solving complex problems quickly.
conduit—a tube or underground passage for electric wires or cables.
connection—the act or process of joining together; a contact between two circuits or electrical wires.
correct—to make or set right; to point out for amendment the errors or faults of.
craft—an occupation or trade requiring manual dexterity or artistic skill.
credit—delayed payment; time allowed for delayed payment.
crown—the part of a tooth outside the gum or an artificial substitute for this.
curriculum—the courses offered by an educational institution or one of its branches.
customer—a person who buys, especially a regular patron of a particular store; buyer; purchaser.

decay—rot; your teeth decay if they are not cared for.

demonstrate—to show clearly; to prove or make clear by reasoning or evidence.

denture—a set of teeth; an artificial replacement for one or more teeth, especially: a set of false teeth.

department—a distinct sphere; a division of a college or school giving instruction in a particular subject.

deposit—something placed for safekeeping, as money deposited in a bank.

design—to conceive and plan out in the mind; to make a drawing, pattern, or sketch; to draw the plans for.

diagnosis—the art or act of finding out what disease a person or animal has by examination and careful study of the symptoms.

disease—an impairment of the normal state of the living animal or plant body that affects the performance of the vital functions; sickness; illness.

disinfect—to free from infection, especially by destroying harmful germs.

duct—a single pipe for electric cables.

earn—to receive for work or service; be paid.

education—the act or process of educating or of being educated; the field or study that deals mainly with methods of teaching and learning in schools.

emergency—a sudden need for immediate action; an unforeseen combination of circumstances, or the resulting state, that calls for immediate action.

endorse—to write on the back of, especially to sign one's name as payee on the back of a check to obtain cash or credit.

globe—engine—engine—a machine for converting any of various forms of energy into mechanical force and motion.

environment—surrounding things, conditions, or influences; the aggregate of social, cultural and physical conditions that influence the life of an individual or community.
epidemic--an outbreak or product of sudden rapid spread, growth, or development.

equipment—the set of articles or physical resources serving to equip a person or thing; as the implements used in an operation or activity.

examine—to inspect closely.

exercise—to use repeatedly in order to strengthen or develop.

extract—to draw forth; especially, to pull out forcibly.

fabricate—to construct, manufacture, or build.

file—to arrange in order for preservation or reference.

filling—something put in to stop up or close, as a filling in a tooth.

frame—the support over which something is stretched or built, as the frame of a house.

franchise—the privilege, often exclusive, of selling the products of a manufacturer in a given area.

germs—a microscopic (very small) animal or plant, especially one that causes disease.

good will—the good reputation and steady trade that a business has with its customers; a part of the value of a business that is largely due to the good opinion of its customers.

high-rise—of or having to do with a building which has many stories.

install—to put in position for use.

instruction—lesson; the action, practice or profession of a teacher.

instrument—a means whereby something is achieved, performed, or furthered; utensil, implement.

job—employment; work done regularly; a piece of work.

journeyman—a worker who has learned a trade and works for another person, usually by the day; an experienced reliable workman in any field.

lecture—a talk given before an audience or class, especially for instruction.
livelihood--a means of keeping alive; support.

lumber--timber or logs, especially when dressed for use.

major--a subject of academic study chosen as a field or specialization.

master--an expert, such as a skilled workman; a workman qualified to teach apprentices.

medication--a medicinal substance; used for tending or curing disease.

menu--a list of the dishes that are to be served at a meal.

merchandise--goods for sale; articles that are or may be bought and sold.

microscope--an instrument with a lens for making small things look larger.

nutrition--food, nourishment. The process by which food is used in the body.

occupation--work of any kind which a person does regularly or for which he is trained, whether or not he is working at the moment or is paid.

oral--of, given through, or affecting the mouth.

order--a statement or list of things telling a store or tradesman what you wish sent.

parcel post--the branch of the postal service that carries parcels or packages.

passbook--a small book in which a bank keeps a record of what a person deposits and withdraws; chiefly used in the United States for savings accounts.

patient--an individual awaiting, or under, medical care and treatment.

pneumatic--of, relating to, or using air, wind, or other gas; moved or worked by air pressure.

pollution--a polluting; defiling; uncleanness.

prepare--to make ready.

prescription--a written direction or order for medicine.

pressure--a state of strain, as, working under pressure.

preventive--devoted to or concerned with prevention: precautionary.
procedure—A particular way of accomplishing something or of acting; a series of steps followed in a regular definite order.

prototype—an original model on which something is patterned.

rehabilitate—to restore to good condition.

relay—an electromagnetic device in which a weak current controls a strong current. A relay is used in transmitting telegraph or telephone messages over long distances.

responsibility—the quality or state of being responsible: as moral, legal, or mental accountability.

salary—a fixed payment made periodically to a person, especially by the week or month, for regular work.

sanitary—characterized by or readily kept in cleanliness.

schedule—to appoint, assign or designate for a fixed future time.

service—a helpful act or acts; conduct that is useful to others; work for others; aid.

skill—the ability to use one's knowledge effectively and readily in execution or performance; a learned power of doing a thing competently.

solder—a metal that can be melted and used for joining; to fasten with solder.

staff—the people who assist a director in carrying out an assigned task.

statistics—a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data.

sterilize—to make sterile; as to free from living germs.

stethoscope—an instrument used to detect and study sounds produced in the body.

stock—things for use or for sale; supply used as it is needed.

survey—to determine the form, extent, and situation of a tract of ground; to measure land carefully for size and shape.

switchboard—a panel or group of panels containing the necessary switches, meters, and other devices for opening, closing, combining, controlling, measuring, and protecting a number of electric circuits. A telephone switchboard has plugs for connecting one line to another.
teletypewriter—a telegraphic device sending and receiving signals by means of two instruments resembling typewriters.

therapy—remedial treatment of bodily disorder.

thrust—force exerted by the rearward ejection of gases, etc., from a jet engine or rocket engine that produces forward movement.

trade—the business or work in which one engages regularly; an occupation requiring manual or mechanical skill.

transaction—the carrying on of business.

transit—an instrument used in surveying to measure horizontal and vertical angles.

verify—to prove to be true or correct.

cation—an occupation, business, profession, or trade.

weight—how heavy a thing is; amount a thing weighs.

weld—to join together by hammering or pressing while soft and hot.
REFERENCES

RECOMMENDED FOR TEACHERS


*Available in the Professional Library, Atlanta Public Schools Learning Resources Center.
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133
TAXI DRIVER

COURTOWN  THE '70'S
SANITATION ASSISTANT
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