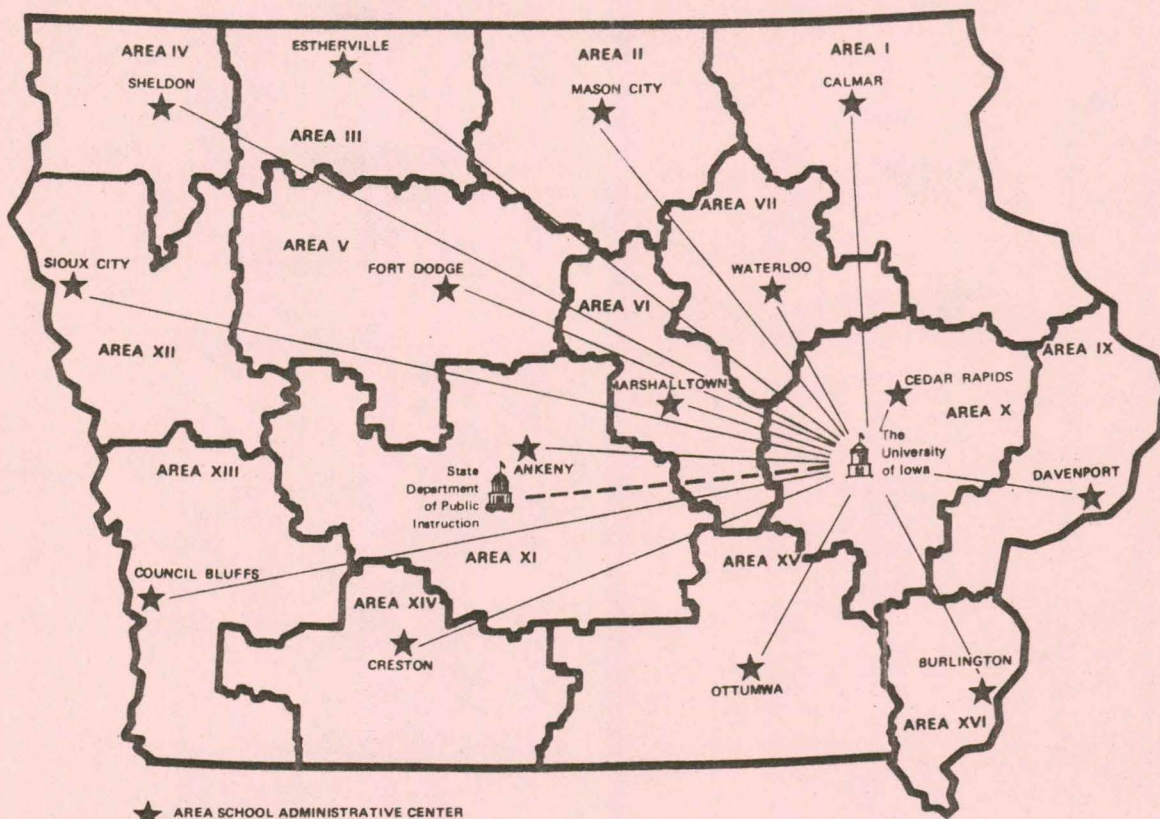


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# PROGRAM IN HEALTH OCCUPATIONS EDUCATION

THE UNIVERSITY OF IOWA



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PROGRAM IN HEALTH OCCUPATIONS EDUCATION  
THE UNIVERSITY OF IOWA  
MARA BUILDING, 135 MELROSE AVENUE  
IOWA CITY, IOWA 52242

Program in Health Occupations Education  
Division of Health Affairs  
The University of Iowa  
MARA Building  
135 Melrose Avenue  
Iowa City, Iowa 52242

in cooperation with

Area Schools and Career Education Branch  
Iowa Department of Public Instruction  
Des Moines, Iowa

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## HEALTH OCCUPATIONS EDUCATION IN IOWA

### DEFINITION

Health occupations education, an integral part of the total field of education, prepares allied health workers for employment in positions supportive to health professionals but not requiring a baccalaureate degree; in addition, it provides continuing education opportunities for health care practitioners.

### NEED

Adequate health care is no longer a privilege; it is now the right of every individual in this nation. Correlatively, provision of this care is demanding more and different kinds of health care delivery systems and, in turn, greater numbers of health care personnel of all types and levels of preparation -- autonomous professionals, allied professionals, technicians, assistants and aides. As nationwide, health services adequate to assure quality care for all Iowa citizens increasingly are including functions performed by supportive health care personnel prepared in health occupations education programs.

### ADMINISTRATION OF PROGRAMS

In Iowa, health occupations education programs are administered predominately by the State's 15 area schools (13 community colleges and two vocational-technical institutes, some with satellite campuses) in cooperation with the State Department of Public Instruction. However, some programs are administered by hospitals and a few by private schools. High schools in the State are beginning to implement programs which provide opportunities for students both to explore careers in the health field and, as appropriate, to become prepared at the aide level in selected health occupations.

### LEADERSHIP ROLE OF THE UNIVERSITY OF IOWA

The Program in Health Occupations Education is an integral part of The University of Iowa, administered under the office of Vice President of Academic Affairs and Dean of the Faculties. Personnel in the Program also serve as the professional staff for Health Occupations Education, Career Education Branch, Iowa Department of Public Instruction. This cooperative arrangement, existent since 1958, resulted from a request of that Department and continues through a contractual agreement between the two agencies. It is the outgrowth of consultative services provided by University personnel since the implementation of its experimental-demonstration program in practical nurse education in 1952. The Program in Health Occupations Education was established in 1965 and designated as the organized unit through which the University would continue, under this contractual agreement, to maintain and expand statewide leadership in health

occupations education. This leadership is provided in four major areas:

- 1) consultant and advisory services,
- 2) teacher education,
- 3) research, and
- 4) curriculum and instructional materials development.

This organizational structure to serve health occupations education in Iowa is unique among the 50 states. The two contracting agencies mutually benefit from having the statewide leadership for health occupations education emanate from The University of Iowa. The geographic proximity of its Program in Health Occupations Education, Medical Center, College of Education, and Extension Division enhances ready interaction among professionals in these areas, thus enabling a forum for exchanging ideas and philosophies and for sharing developments and research in the fields of both education and health. In this setting, cooperative planning for the preparation of health care workers and health career educators at all levels --- autonomous professional, allied professional, and vocational-technical --- can be fostered, and opportunities for articulation between these levels can be explored and pursued.

In keeping with the purpose for which the Program in Health Occupations Education was established, the activities of its professional staff members include:

- 1) assisting personnel in Iowa's 15 area community colleges and vocational-technical institutes as they plan, implement, evaluate and revise their preparatory and continuing education programs in health occupations education;
- 2) assisting secondary school personnel in their development of health career orientation, exploratory and aide-level preparation programs;
- 3) abetting innovative and new approaches to health manpower education;
- 4) upgrading skills of teachers in health occupations education; and,
- 5) stimulating the collaboration of efforts among the various educational, professional, service and governmental groups interested in the education of health workers who function in roles supportive to health professionals.

#### CURRENT OFFERINGS IN HEALTH OCCUPATIONS EDUCATION

##### Types

Iowa's 13 community colleges and two technical institutes presently offer a total of 77 health occupations education preparatory programs of one or two years in length, representing 18 different types of preparation:

<u>Type</u>	<u>Number</u>
Associate Degree Nurse	14
Dental Assistant	8
Dental Hygienist	2

<u>Type</u>	<u>Number</u>	
Dental Lab Technician	1	
Environmental Health Assistant	1	
Environmental Health Technician	1	
Health Care Facility Administrator	1	
Medical Office Assistant	7	
Medical Lab Assistant	3	
Medical Lab Technician	1	
Occupational Therapy Assistant	1	
Operating Room Technician	6	
Optometric Assistant	1	
Orthopaedic Physician's Assistant	1	
Practical Nurse	24*	*Includes 1 Secondary
Radiologic Technologist	1	Program at Des
Respiratory Therapist	2	Moines Tech
Respiratory Therapy Technician	2	
	<u>77</u>	

A short description of each of the 18 types of preparation and the locations of the 77 existing preparatory programs are included in this document.

In addition; among the 15 area schools, each is approved to offer short-term preparatory nurse aide-orderly programs when and as the need for these workers exists in the area, and most offer continuing education courses for employed health workers seeking retraining or upgrading of their skills. Several also have established a pre-career program for the purpose of: (1) evaluating the interest, motivation, and abilities of disadvantaged individuals and, (2) as necessary, providing the basic education and services necessary to assist these individuals to become qualified for admission into an ongoing preparatory program.

Some area schools have been instrumental in forming voluntary consortia of health care facilities for the purpose of planning and conducting continuing education for health care personnel employed in the school's geographic region. All 15 of the area schools employ a coordinator of continuing health occupations education who serves as a liaison person between the school and community health agencies and has responsibility for developing programs for which a need has been identified.

#### Enrollments

One- and two-year preparatory programs. In the fall of 1976, 3,133 students (2,888 women and 245 men) were enrolled in 77 preparatory programs. This represents a 7.7 per cent increase over the 1975 fall enrollment of 2,908 (2,668 women and 240 men) in the then existent 76 programs.

Short-term nurse aide-orderly programs. During the fiscal July 1, 1975 through June 30, 1976, a total of 1,546 persons were enrolled in 115 nurse aide-orderly programs. This is 5.8 per cent less than during the previous fiscal year when a total of 1,642 were enrolled in 134 such programs.

Continuing education courses. Last fiscal year the expansion in continuing education was dramatic; a total of 62,911 employed health care

practitioners enrolled in 2,390 courses offered in the area schools. This represents a 32.1 per cent increase over the previous fiscal year when 47,628 were enrolled in 1,674 courses.

#### Number and Qualifications of Faculty

Totally, 315 (236 full-time and 79 part-time) instructional personnel are employed for the 77 preparatory programs; of the 315, approximately 30 per cent have earned a master's or baccalaureate degree.

With the approval of the Iowa Board of Nursing, a few selected licensed practical nurses, teaching under the supervision of registered professional nurses, serve as faculty members in programs of practical nurse education. In addition to preparatory program faculty, each area school employs an allied health professional responsible for planning and implementing continuing education courses within the geographic area served by that school.

All instructional personnel have had experience as practitioners in the field in which they are teaching. They avail themselves of inservice teacher education opportunities provided by professional staff of the University's Program in Health Occupations Education and many also are taking some courses in institutions of higher education on a credit basis.

#### Career Mobility Opportunities

Career advancement opportunities, based on previous formal preparation and competencies gained in employment, are increasingly common in Iowa's health occupations education programs. The greatest progress has been made in the nursing and medical laboratory fields. For example, prepared nurse aides and orderlies may be admitted with advanced standing into a program in practical nurse education, and licensed practical nurses into an associate degree nursing program. Similarly, within the medical laboratory area the graduate may continue on in the associate degree program and achieve medical laboratory technician status upon completion of the CLA program.

#### PROFESSIONAL DEVELOPMENT OPPORTUNITIES

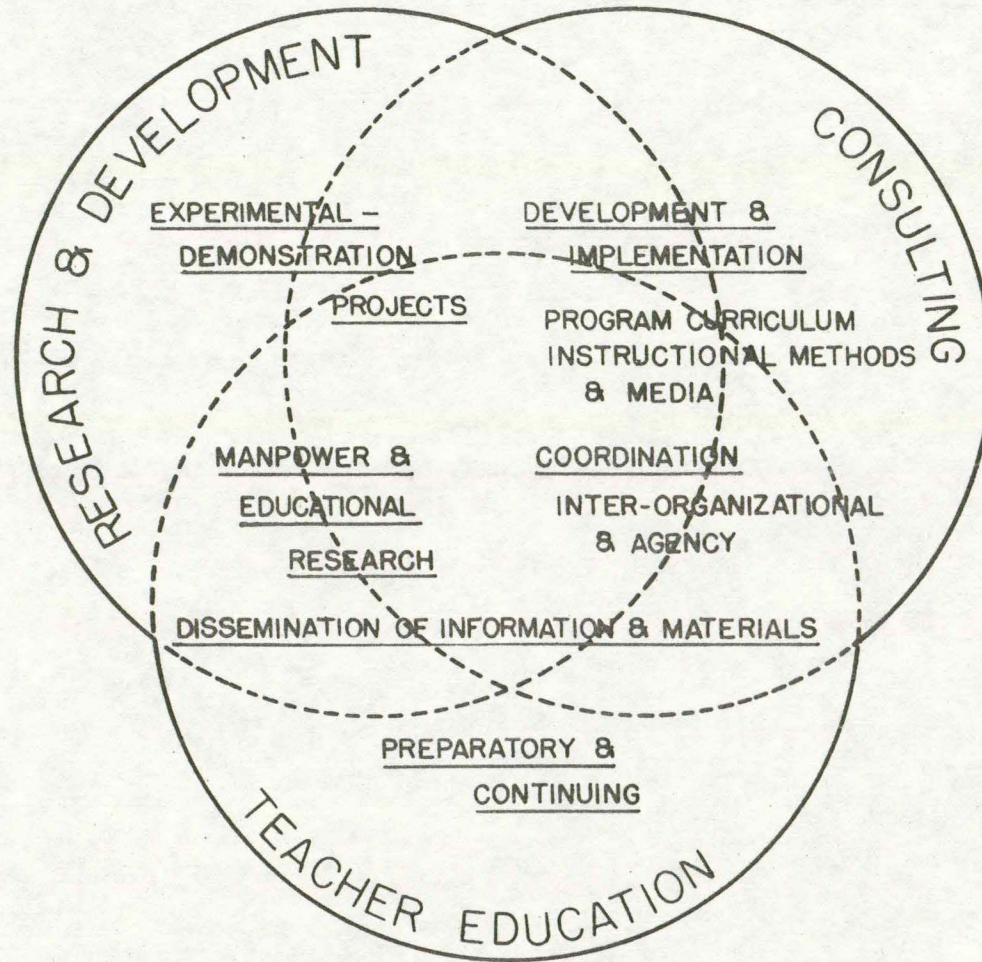
In addition to inservice teacher education offerings available to all health occupations education instructional personnel in the State, The University of Iowa College of Education, with cooperation from personnel in the Program in Health Occupations Education, instituted and now offers master's, Ed.S., and doctoral degree programs preparing administrators, teachers, and other leadership personnel for the field of health occupations education. The program has similarly cooperated in the development of a bachelor degree program. This program, as approved, will make possible a major portion of requirements to be completed off campus in conjunction with the area schools --- through extension and correspondence courses as well as a supervised teaching practicum. As currently designed, it will honor educational experience of diploma nurses and other health occupations education personnel prepared at the community college level. The University's

Program in Health Occupations Education, in cooperation with the Iowa Department of Public Instruction, offers competency-based instruction leading to completion of teacher certification and recertification requirements.

#### FOLLOW-UP OF GRADUATES

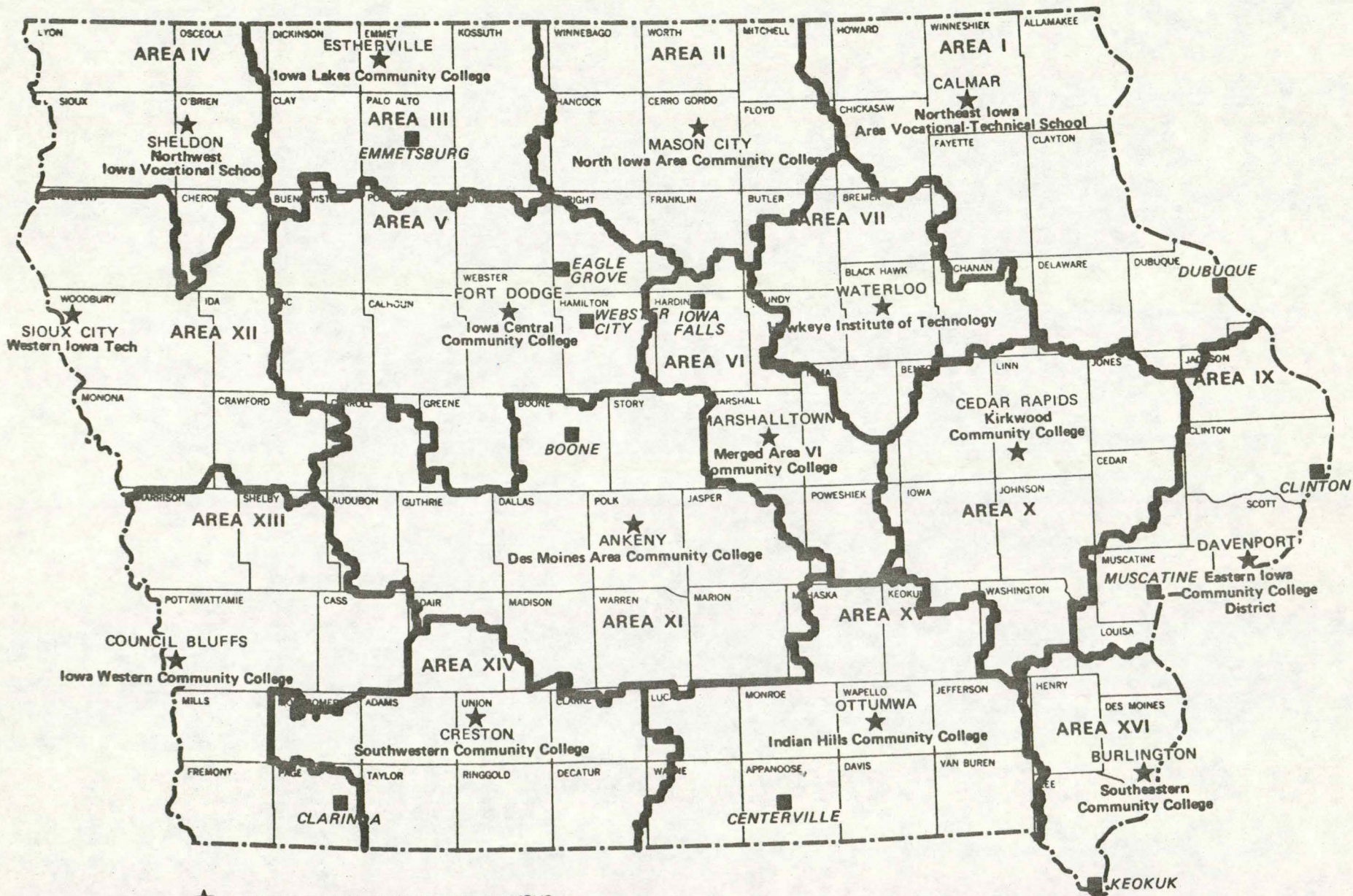
Studies are conducted annually by the Iowa Department of Public Instruction to determine the rate and type of employment of graduates from all health occupations education programs in Iowa. The placement rate remains high; to date there has been no evidence that the supply exceeds the demand for these health workers. The fiscal year 1973 study revealed that 92.2 per cent were employed in a health-related occupation.

ACTIVITIES OF THE  
PROGRAM IN HEALTH OCCUPATIONS EDUCATION  
THE UNIVERSITY OF IOWA





# MERGED AREA SCHOOLS



★ ADMINISTRATIVE CENTER AND CAMPUS  
 ■ OTHER CAMPUS (AREA SCHOOLS WITH MORE THAN ONE MAJOR CAMPUS)

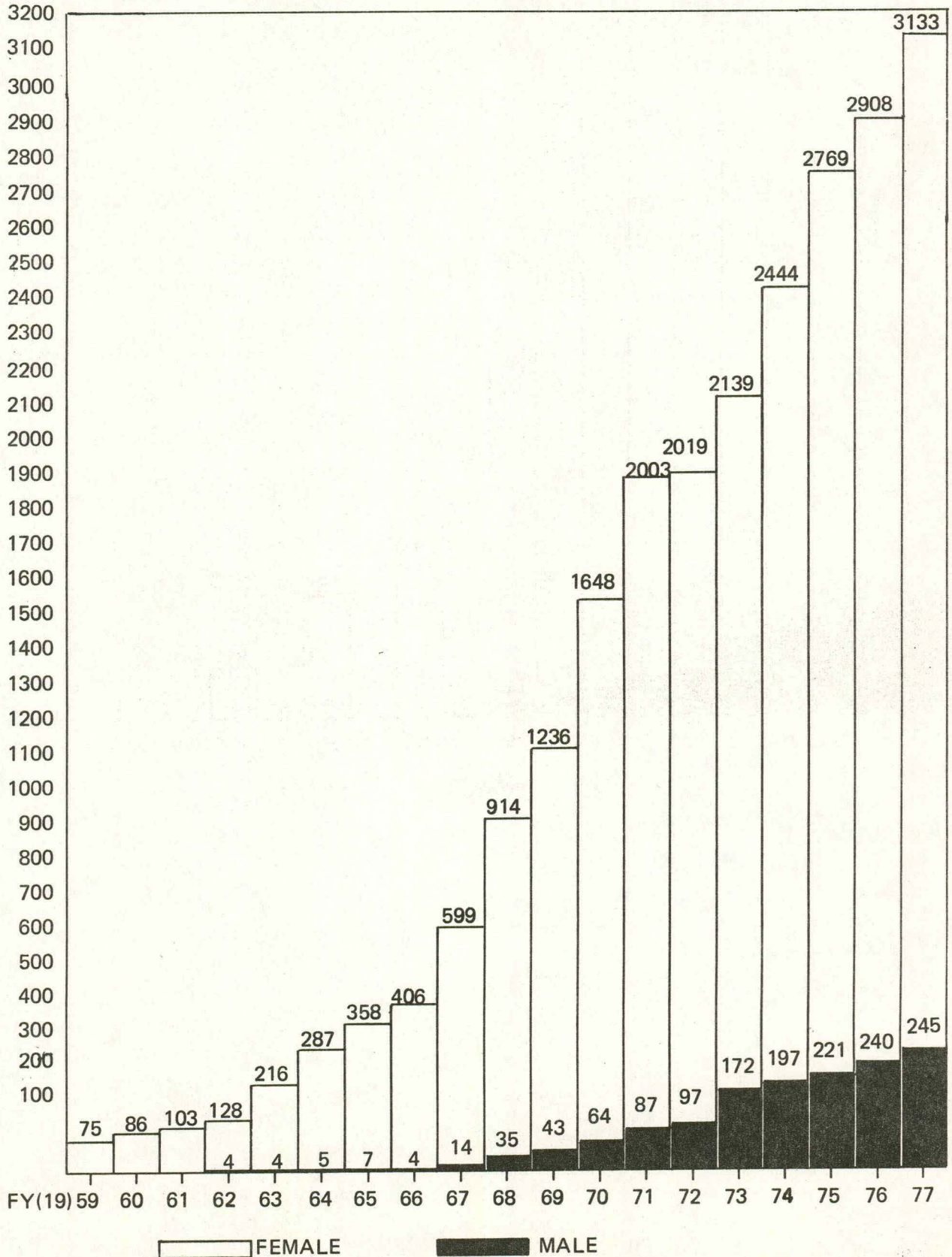
# HEALTH OCCUPATIONS EDUCATION IN IOWA

NUMBER OF ONE- AND TWO-YEAR PREPARATORY  
PROGRAMS, BY TYPE—FY's 1957 - 1977

Practical Nursing	2	3	4	4	5	5	8	11	11	13	19	19	19	20	23	23	23	23	24	24	24
Medical Office Assistant									1	1	1	5	5	5	5	5	6	7	7	7	7
Medical Lab. Assistant										1	1	3	4	4	4	4	4	4	4	3	3
Dental Assistant												4	6	6	7	7	7	8	8	8	8
Associate Deg. in Nursing												2	2	5	8	9	12	13	14	14	14
Operating Room Technician												1	3	3	3	3	3	5	5	6	6
Dental Lab. Technician													1	1	1	1	1	1	1	1	1
Environmental Assistant													1	1	1	1	1	1	1	1	1
Occupational Therapy Assist.													1	1	1	1	1	1	1	1	1
Orthopaedic Physicians Assist.													1	1	1	1	1	1	1	1	1
Long-Term Care Facilities Admin.															1	1	1	1	1	1	1
Respiratory Therapy																	1	2	2	2	2
Medical Lab. Technician																		1	1	1	1
Environmental Technician																		1	1	1	1
Dental Hygiene																			1	2	2
Respiratory Therapy Tech.																				2	2
Radiologic Technology																				1	1
Optometric Assist.																					1
<b>TOTAL NUMBER</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>11</b>	<b>12</b>	<b>15</b>	<b>21</b>	<b>34</b>	<b>43</b>	<b>47</b>	<b>55</b>	<b>56</b>	<b>62</b>	<b>70</b>	<b>73</b>	<b>76</b>	<b>77</b>
<b>FY(19)</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>	<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>77</b>

# HEALTH OCCUPATIONS EDUCATION IN IOWA

ONE- AND TWO-YEAR PREPARATORY PROGRAM  
ENROLLMENTS FY 1959 - 1977





BRIEF DESCRIPTION OF EACH TYPE OF  
ONE- AND TWO-YEAR PREPARATORY HEALTH OCCUPATIONS  
PROGRAMS PRESENTLY OFFERED IN IOWA

1. Associate Degree Nurse (Associate Degree in Applied Science)

This two-year program prepares students to carry out nursing care measures and medically delegated techniques, using principles derived from the social, physical, and biological sciences. Classroom instruction is closely correlated and concurrent with selected learning experiences in hospitals and other health-care areas.

After successfully completing an approved program, upon passing a State Board Examination the graduate becomes a Registered Nurse (R.N.).

2. Dental Assistant

This one-year program offers classroom and laboratory activities correlated with clinical practice. The graduate is prepared to assist the dentist at chairside, perform secretarial duties and do those laboratory procedures which are done in the dental office.

Certification (C.D.A.) is granted following graduation from an approved educational program, passing qualifying examinations and completing a specified amount of work experience.

3. Dental Hygienist (Associate Degree in Applied Science)

This two-year program is designed to prepare graduates for positions in general and specialty dental offices, hospitals, schools, public health agencies and industrial agencies. Students are trained in educational methods and preventive clinical services which qualify them as dental health educators and competent clinicians. The emphasis is placed on the correlation between prevention, education, and the clinical phases of dental hygiene practice, and the basic and social sciences. Graduates of the program receive an associate degree in applied science. They are eligible to take the national, state, and regional licensure examinations in dental hygiene.

4. Dental Laboratory Technician (Associate Degree in Applied Science)

Graduates of this two-year program are skilled craftsmen who make dentures, crowns, bridges, and other dental and orthodontal appliances according to prescriptions provided by dentists. This member of the dental health team develops a high degree of skill in his chosen occupations through theoretical and laboratory studies which are well correlated throughout the program. Career opportunities are available in dental laboratories, individual dentist's office and in some hospitals.

Certification (C.D.T.) is gained through graduation from an approved program, passing an examination and completing a specified amount of satisfactory work experience.

5. Environmental Health Assistant

Following completion of this one-year program, the environmental health assistant is prepared to assist sanitary engineers, sanitarians and other public health officials in safeguarding the health and welfare of both urban and rural communities by inspecting housing conditions, milk, water, sewage disposal facilities, air, food, and other potential health hazards. The curriculum is composed of correlated classroom, laboratory and field experiences.

6. Environmental Health Technician (Associate Degree in Applied Science)

This six quarter program prepares the graduate to assist engineers, sanitarians, physicians, veterinarians and others concerned with maintaining a health environment. The technician gathers data and samples of air, water and food and assists in their analyses. He also assists in the operation of water and waste water plants, solid waste disposal facilities, and inspects and evaluates facilities for compliance with laws and regulations. Additional functions include accident prevention, public health standards, rodent control and other similar areas related to environmental health.

7. Health Care Administrator (Associate Degree in Applied Science)

This two-year program prepares graduates to function in the administration of long-term care facilities. Program content emphasizes special problems of the aged; the provision of health and social services; and the legal, financial, and personnel aspects of administration. Learnings include both theory and practicum.

8. Medical Laboratory Assistant

This one-year program is designed to prepare qualified men and women to work in a medical laboratory under the supervision of a medical technologist or pathologist and/or other qualified physician. They perform routine laboratory procedures and tasks in the areas of bacteriology, blood banking, chemistry, parasitology, serology, and urinalysis.

9. Medical Laboratory Technician (Associate Degree in Applied Science)

This two-year program prepares graduates to perform selected clinical laboratory tests under the supervision of the medical technologist, pathologist or other qualified professional. These tests are in such areas as the blood bank, biochemistry, microbiology and hematology.

Certification is available to graduates who successfully pass an examination. In some cases they also must meet specified experience requirements.

10. Medical Office Assistant

This one-year program prepares the student to be employed in a private physician's office, clinic or hospital. Through correlated classroom, laboratory and clinical experiences, the student learns to prepare patients for examination, perform routine laboratory tests and assist in office and medical record keeping activities.

Certification may be granted following graduation from an approved educational program, passing qualifying examinations and completing a specified amount of work experience.

11. Occupational Therapy Assistant

This one-year program of classroom studies, laboratory experiences and clinical practice, prepares workers to give assistance to Registered Occupational Therapists in rehabilitative and therapeutic activities. The assistant becomes proficient in guiding and encouraging the patient in activities involving a variety of manual and creative areas for the attainment of specific treatment goals.

12. Operating Room Technician

Through this one-year program of classroom study, laboratory activities and clinical experience, the student learns to function under the direct supervision of the professional nurse or surgeon in the operating room. The activities of the operating room technician include preparation of surgical environment and serving as a "scrub" or "circulating" assistant during surgical procedures.

13. Optometric Assistant

One year in length, this program prepares graduates for employment as assistants to the optometrist in the diagnosis and management of vision related problems. The graduate, under supervision of the optometrist, performs a variety of functions such as office management, patient instructions, and technical skills such as selection, fabrication, fitting and care of eyewear.

14. Orthopaedic Physician's Assistant (Associate Degree in Applied Science)

This two-year program prepares graduates to work with the orthopaedic surgeon in the emergency room, case room, operating room, and other hospital areas as well as in clinics and private offices. Through correlated classroom, laboratory and supervised clinical experiences, the assistant is trained to prepare and maintain surgical equipment, assist in surgery, apply plaster casts and set up traction and suspension equipment.

15. Practical Nurse

This one-year program of concurrent classroom, laboratory, and clinical experiences prepares persons for employment in hospitals, nursing homes, doctors' offices and a variety of other health care facilities. The practical nurse gives nursing care to patients in situations relatively free of complexity and, in a close working relationship, assists registered nurses in giving nursing care to patients in more complex situations. Following successful completion of the program, graduates are eligible to write the licensure examination to become a Licensed Practical Nurse (L.P.N.).

16. Radiologic Technologist (Associate Degree in Applied Science)

This is a two-year program that prepares men and women working under the supervision of a radiologist and/or physician to assist in performing diagnostic procedures in x-ray departments. Typical duties include positioning patients; determining exposure; operating x-ray machines; taking, developing and critiquing films, assisting the M.D. in administering opaque substances for diagnostic tests; operating portable x-ray machines; and recording tests. Emphasis is placed on safety and accuracy in performing the above procedures. Upon successful completion of an AMA accredited program and passing the appropriate examination, the graduate will hold the title ARRT (American Registry of Radiologic Technologists).

17. Respiratory Therapist (Associate Degree in Applied Science)

Graduates of this two-year program function in a role primarily, but not limited to, cardiovascular care in the form of oxygen administration, ventilatory support, blood gas analysis, chest-physiotherapy and pulmonary rehabilitation. This role also often encompasses other related therapeutic and diagnostic functions such as pulmonary function testing, electrocardiography and cardiovascular monitoring. Graduates are eligible to take the written and oral registration examination offered by the American Registry of Respiratory Therapists.

18. Respiratory Therapy Technician

This one-year program is designed to prepare graduates for employment in hospital respiratory therapy departments. This involves performance of intermittent positive pressure breathing (IPPB), humidity/aerosol therapy, medical gas administration, pulmonary drainage procedures, and cardiopulmonary resuscitation. In addition, the graduate will be able to administer aerosolized drugs and implement infection control measures including aseptic techniques and handling of contaminated equipment.

SHORT-TERM PREPARATORY PROGRAM

Nurse Aide-Orderly

Two types of nurse aide-orderly programs, both consisting of formal classroom instruction correlated with supervised clinical experience, are offered in Iowa:



1. The first, a basic 60-hour course is designed to prepare individuals with the basic knowledge and skills necessary to function as a nurse aide in a nursing home or extended care facility. This course meets the requirements of the State Department of Health for certification of nurse aides employed in this type of facility.
2. The second is a 120-hour course which also provides basic skills, but includes more depth and breadth in simple and routine nursing care procedures. This course is oriented more to employment in a hospital setting.

#### ADULT AND CONTINUING EDUCATION COURSES

The adult and continuing education courses administered last year by Iowa's 15 area schools varied in length according to the breadth and depth of content in each curriculum, and included content in areas such as: intensive coronary care; pharmacology review and administration of medications; care of high-risk newborns; rehabilitation of stroke patients; nursing care of patients with burns, with urological problems, and with diabetes; emergency medical care; nursing home administration; head nurse management; aspects of aging; radiological monitoring; environmental problems; dental assisting; supervisory practices; and medical laboratory instrumentation.

A summary report of the Adult and Continuing Education Courses offered in Iowa's area schools is available on request from:

Program in Health Occupations Education  
The University of Iowa  
135 Melrose Avenue  
Iowa City, Iowa 52242

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