

AN ABSTRACT OF THE THESIS OF

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Title: CARL L. ANDERSON: LIFE AND CONTRIBUTIONS TO  
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Dr. Gordon W. Anderson

The purpose of this study of the life and career of Dr. Carl Leonard Anderson was to recount his professional contributions to the field of health and relate these to public health and health education. The major emphasis of this study concerned Dr. Anderson's professional life.

The accomplishment of the study depended upon (1) primary source material such as taped interviews, personal communications, and questionnaires provided by Dr. Anderson, his family, and his professional associates; and (2) secondary sources including books, newspapers, theses, and other publications related to historical research.

Ironwood, a small mining town in the Upper Peninsula of Michigan, was Carl Leonard Anderson's home during his formative years.

He was born on February 28, 1901, to Swedish immigrant parents. He attended the University of Michigan in Ann Arbor, graduating in the upper two percent of his class in 1928. He taught for two years at a high school in Grosse Ile, Michigan, and returned to the University of Michigan to complete master's and doctoral degrees in public health.

Carl Anderson worked for public health departments in Michigan until 1935, when he left public health for the classroom. He was chairman of the Department of Physiology, Public Health and Hygiene at Utah State University for ten years; a professor of Biological Science at Michigan State University for four years; and head of the Department of Health at Oregon State University for 22 years.

Dr. Anderson believes that no one can take from an individual the gratification of a life of service, dedicated to the betterment of humanity. This belief was exemplified throughout his professional life by the many official and voluntary health organizations he served, including the Oregon Heart Association, the Oregon State Department of Education, and the Oregon State Department of Human Resources, Health Division.

He also served as a member and chairman of numerous committees in national, regional, and state professional organizations. Dr. Anderson's contributions to such organizations as the state and regional affiliates of the American Association for Health, Physical

Education, and Recreation, and the American Public Health Association were extensive.

He received several honors and awards including the Oregon Heart Association's Outstanding Volunteer Award in 1969, and an Honorary Life Membership Award from the Oregon Association for Health, Physical Education and Recreation in 1965. In 1972, shortly after his retirement, he received the Distinguished Professor Award at Oregon State University.

Among Dr. Anderson's greatest professional contributions to the fields of public health and health education are the four textbooks he wrote. They have been used by a quarter of a million readers throughout the United States, Canada, England, Japan, and other parts of the world by schools, colleges and universities, public health organizations, and schools of medicine and nursing.

His accomplishments through his teaching, volunteer work, and administration are recognized by leaders of his generation in the health profession. Documentary evidence and professional citations lend support to the conclusion that Carl L. Anderson was an important contributor to the development of the field of health.

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Redacted for privacy

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Figure 1. Dr. Carl Leonard Anderson

# CARL L. ANDERSON: LIFE AND CONTRIBUTIONS TO PUBLIC HEALTH AND HEALTH EDUCATION

## I. INTRODUCTION

To understand the trends and philosophies which make up the interesting and significant history of public health and health education, one must study the lives and contributions of past leaders in the field who were responsible for its development. Biographical studies have often been made of leaders whose influence have enriched the heritage of a profession. "One of the signs of maturity in any profession is the accumulation of a literature which reports on its origins, its success and failures, and its progress to the present time" (Jones, 1955, p. 193). Historical research is significant, not only for the increase of knowledge in itself, but also because "it is the past that makes the present, and what goes before is the key to what comes after" (Robinson, 1926, p. 3).

### The Problem

This was a study of the professional life and contributions of Carl Leonard Anderson. The purpose was to trace and identify those influences in his life which shaped the progression of his career, and to examine the influences he exerted on public health and health education.

### Delimitations

The research for this study was limited to documentation, and to interpretation of the life and professional career of Carl L. Anderson. Those individuals whose opinions were solicited through interviews, correspondence, and questionnaires, were personally acquainted with Dr. Anderson, or knew him through his work.

### Significance of the Study

A biography is the study of a life made for the purpose of discovering insights and understandings of the past that they may serve as guideposts for the present and the future. The study of Dr. Anderson provides such guideposts to students of his profession, and may also encourage further exploration of the lives of other men and women in his field.

No evidence was available to indicate that a study of Dr. Carl L. Anderson had ever been undertaken. The importance of his influence on the health profession, however, made it desirable that such a study be made.

### Hypotheses

1. That Dr. Carl L. Anderson made a significant contribution to the development of health education and, to a smaller

extent, public health.

2. That Dr. Anderson's contributions were largely determined by his experience while head of the Department of Health at Oregon State University from 1949 to 1971.

3. That the impact of Dr. Carl L. Anderson on public health and health education was in part the result of the diversity of his interests, including the writing of articles and textbooks, the development of research instruments, and the serving of official, voluntary, and professional health organizations.

### Procedures

Ten selected biographies were reviewed to provide direction for this study (Appendix I). Personal interviews with those acquainted with Dr. Anderson were conducted whenever possible. Interviews by questionnaire and correspondence also provided valuable data from distant colleagues, students, and family.

Primary data for the biographical research were collected from the following:

1. Thirty-six personal communications and questionnaires from colleagues (Appendix II);
2. Twenty-nine questionnaires from former students (Appendix III);
3. Twenty-six tape-recorded interviews with colleagues and

students (Appendix IV);

4. Personal and professional records belonging to the Anderson family;

5. Five tape-recorded and 20 personal interviews with Dr. Anderson;

6. Five tape-recorded interviews with members of the Anderson family;

7. Examination of journal and newspaper accounts of Dr. Anderson's accomplishments and contributions;

8. Examination of Dr. Anderson's published and unpublished writings, including articles, books, and monographs;

9. Examination of proceedings, minutes, reports, letters, and other data concerning Dr. Anderson's professional activities.

These primary sources were supplemented by secondary sources if they met standards of reliability and accuracy. Secondary sources included:

1. Books pertaining to the history of the United States and Europe;

2. Unpublished master's and doctoral theses;

3. Publications pertaining to the history and administration of public health and of health education;

4. Historical data concerning specific regions and institutions in the United States relevant to Dr. Anderson's career, including

material about the states of Michigan, Utah, and Oregon;

5. Books written about the lives of outstanding individuals in the history of the United States.

During the course of this study, visits were made to Oregon State University in Corvallis, Oregon College of Education in Monmouth, the Oregon State Department of Human Resources (Health Division), the American Cancer Society (Oregon Division), the Oregon Heart Association, and the Oregon Lung Association. The archives and libraries of Corvallis, Oregon, were researched. Newspapers of Corvallis, Oregon; Ironwood, Michigan; and Grosse Ile, Michigan; were investigated.

#### Evaluation and Treatment of Data

"The actual existence of either primary or secondary historical sources does not guarantee their authenticity, accuracy or validity" (Clarke and Clarke, 1970, p. 69). With this in mind, external and internal criticism were applied to the data.

The following are examples of external criticism employed:

(1) minutes and proceedings of organizations referring to Dr. Anderson were, where necessary, authenticated through the archivist or present director of the organization or committee in question; (2) authorship of a published document was attributed to the name affixed to the title of the work, the personal qualifications of



the author; the time of writing, and the relationship of the document to other such publications were determined; and (3) testimony regarding Dr. Anderson carried the personal affidavit of the colleague, student, or family member interviewed.

When dealing with problems of internal criticism, it was impossible to find and use materials showing evidence free of bias or prejudice. Most materials, written and oral, were biased to some degree. These biases were evaluated in the following manner: (1) testimony of interviewees was required to be specific, descriptive and, whenever possible, documented; (2) all data were the expressed judgment of a particular person and not a resumé of opinions of others concerning an event; (3) when a view of an event or an opinion was taken from more than one source, the accuracy of the statement made was usually confirmed; (4) statements made concerning facts were documented by the interviewee or the investigator; and (5) interviewees were asked to supply evidence for their statements to clarify their intentions, and to apprise the investigator of their good faith.

#### Definition of Terms

In order that there might be clarity, the following terms are defined.

Historical Research - The investigation of observations made by others who have lived before, recorded in personal files, letters, minutes of meetings, other contemporary documents, and in the memories of friends or relatives. If the historical research centers on the life of an individual, it is called biographical research (Hubbard, 1973).

Historiography - The procedure used in researching and writing a biography; the methods and techniques of doing historical research.

External Criticism - A means of determining the authenticity or validity of a document. The authorship of the document, the day it was written, where it was written, and why it was written are firmly established by research. Whether the document is original or revised, contains deletions and additions, is also carefully explored.

Internal Criticism - A judgment made by the historian of the trustworthiness of a document. This requires the consolidation of the literal and actual meaning of the statements within the document; e.g., what the author meant by each statement, and if his statements are credible.

Public Health - All formally-organized efforts of society to eliminate disease, to promote the general well-being of the public, and to extend the length of life.

Health Education - Activities planned and conducted by health educators to teach people how to make informed health decisions affecting their personal, family, and community well-being (Report of the Joint Committee to the A. A. H. P. E. R., 1973).

Voluntary Health Organizations - nonprofit associations organized on a national, state, or local level, composed of lay and professional persons, dedicated to the prevention and cure of a particular disease or disability. These organizations are usually supported by voluntary financial contributions primarily from the general public. They include such organizations as the American Heart Association and the American Cancer Society.

Official Health Organizations - Organizations supported by tax funds and recognized as governmental health agencies such as city, county and state health departments, and the United States Public Health Service.

Professional Health Organizations - Associations or societies composed of persons who have completed a prescribed curriculum, training, and certification; the common purpose of which is to serve society better through organized efforts, and at the same time promote the interests of the profession. The American Association for Health, Physical Education, and Recreation, and the American Medical Association are examples.

## II. THE FORMATIVE YEARS

Carl Leonard Anderson's early years were formed in an atmosphere of Swedish family life. His home town, Ironwood, Michigan, an international community composed of iron ore workers, provided the environment for Carl's development. Carl's parents and his maternal grandparents provided him with love, strength, and mental stability with which to grow into manhood. He received from his teachers knowledge and encouragement to continue his high school and college education during pre-World War I days. At the University of Michigan, Carl's early scientific interests were stimulated by his professors in the Division of Hygiene, Public Health and Physical Education; the Medical School, and the School of Engineering. In 1928 he was graduated in the upper two percent of his class.

### The Family

Carl Leonard Anderson was born on February 28, 1901, to Alma Larson and Carl Andrew Anderson, in Ironwood, a small mining town in the Upper Peninsula of Michigan. Following traditional Swedish custom, the baby was named for his maternal uncle, Carl Robert. When Carl was three years old, his sister Elsie was born. Four years later, in 1908, Carl Oscar Anderson was born,

followed three years later by Arthur Albert, the youngest.

The Anderson family was of Swedish origin on both sides. Carl Leonard's paternal grandparents, the Anders Ericksons, lived in Arvika, Varmland, a county in Gothland, near the Norwegian border. Carl's maternal grandparents, the Charles Larsons, lived in Kalmar county in Svealand and Gothland. The Larson grandparents emigrated to America, while the Anders Ericksons preferred to remain on their farm in Arvika.

When Carl's grandparents chose to emigrate to America, they were following in the footsteps of many of their fellow countrymen. A country of eight million inhabitants, Sweden has lost one million through emigration since 1850, a ratio of one out of every seven Swedes. These emigrants, and those from other countries together with their descendants, transformed an almost empty continent into the world's most powerful nation (Jones, 1960).

Why did they emigrate? Their reasons were chiefly economic. In America, millions of acres of virgin land awaited cultivation, while in Sweden, much of the best land had been held for centuries by a relative minority and land values were very high. Then, too, wages were higher in America, and capital easier to accumulate. In America, mining and industries were developing and more money was available. As a final inducement, the American climate was considerably milder than that of so northern a country as Sweden.

With the vision of the new "promised land" in his mind, Charles Larson left Sweden in 1882, to seek a new life in the New World. Once in America, Larson chose to live in the Midwest. He settled in Ironwood, Michigan, finding work at the iron ore mines, subsidiaries of United States Steel Corporation and Pickland-Mathers Steel Company. Two years later he sent for his wife Hulda, his three-year old son and five-year old daughter, who arrived in Ironwood in 1884. Four more daughters and two sons were born in America.

In 1899, Carl Andrew Anderson, son of the Anders Ericksons, arrived in Ironwood at the age of 17. Young Carl Andrew worked for the next 65 years in Gogebic County. He was a steam engineer, tending equipment used to pump water out of the shafts of the Oliver Mines. Carl Andrew adapted very well to his new country. He learned to speak nearly accentless English. He lived a long and vigorous life in Ironwood until his death in 1967 at the age of 85.

Although Carl Andrew's wife, Alma Larson, was born in Sweden in 1881, she lived most of her life in America. A small woman, five feet, two inches tall, she lived all her life near her parents. She was warm, tolerant, and quietly efficient, with a strong belief in the dignity and worth of the individual. Alma inspired Carl Leonard to attend high school and college. She recognized her son's scholarly abilities and encouraged him to pursue

more education. She died in 1951, at the age of 70.

### Ironwood

"History has never moved forward in one steady flow to a perfect and unchanging state of balance" (Maurois, 1962, p. 1).

At the end of the 19th century, the United States was suffering from growing pains because of mass immigration. The country had four million inhabitants in 1790, seventeen million in 1840, and seventy-six million by 1900 (Cole, 1968). By the end of the 19th century, the so-called "wild west" had been tamed, and the land from California to the East Coast was settled.

Michigan, the state in which Carl Anderson's family chose to live, is divided into two peninsulas by the Straits of Mackinac, and is bounded by four of the five Great Lakes. In 1839 it had reached a population of approximately 175,000 and was admitted to the Union. By 1900 it had a population of nearly 2,500,000. The state was enriched by ancient glacial movements which gave it some of the most productive soil in the world, mostly in the 300-mile long and 260-mile wide Upper Peninsula, where Gogebic County and the town of Ironwood are located. This rich area became the home of immigrants from Finland, Italy, Poland, Germany, Scandinavia, and the Slavic lands.

Ironwood itself is located on the Montreal River near the Wisconsin border in the Upper Peninsula. Ironwood received its name from an iron ore prospector, James A. Wood, discoverer of the Norrie Mine on the east limits. The Norrie Mine became one of the largest producers of iron ore in the country.

Six years after the arrival of Grandfather Larson, Ironwood became a city with approximately 7,700 inhabitants. With the development of the mines, the population increased until, by the time Carl Leonard was born, it was 15,000. By 1920, a peak population of 33,225 was reached. That year 8,764,000 tons of ore were produced in the 25 local mines. Since that time both mining and population have declined considerably, the present population standing at about 8,700.

#### Carl L. Anderson's Early Training

By the time Carl began his school career at the age of five, significant events in education were taking place in the United States. Until the turn of the century, most students did not attend school beyond the eighth grade. Compulsory school attendance laws increased the school population tremendously. In 1890, only 203,000 students were enrolled in high school, while 12,500,000 were enrolled in elementary school. By 1907, when Carl began school, 73 percent of all American school children were in elementary



schools (Grieder-Romine, 1965).

Carl attended Norrie Elementary School through the fifth grade, completed the sixth grade at Luther L. Wright (the high school building); he started the seventh grade at Central School but finished at Northside Elementary School, Central School having been destroyed by a fire, and he attended the eighth grade in the basement of the Methodist church. The eighth grade represented the last year of education for many of Carl's peers, but he was encouraged by his mother to attend high school at Luther L. Wright.

Although the classical teaching methods of the time were being challenged by Dewey's "learning by doing" philosophy, the Ironwood schools continued to teach traditionally. Carl's interest in mathematics was encouraged by his teacher, Mr. C. D. Whitney, who put problems on the backboard and asked the class to answer them. Carl's early love of writing was intensified by Miss Jean Goudie, his senior rhetoric teacher. Miss Goudie's critical supervision of Carl's writing included careful analysis of the good and bad points of his writing form. She taught him to be critical of his own work. Her sensitive teaching methods made writing an enjoyable task for Carl; and he continued to enjoy writing throughout his career (Anderson, 1973).

Carl's love for reading was as strong as his urge to write. For recreation he often read books he checked out from the local library.

Among his closest friends in Ironwood were Harold "Spike" Nyberg and Lloyd Tresize, both of whom died of tuberculosis within three years after their graduation from high school. The "white plague" also claimed the lives of four members of a Johnson family in Ironwood which left Carl in a state of concern about prevailing health conditions.

In June, 1918, Carl was graduated (with 78 classmates) in the upper 12 percent of his class. Although, at that time, about 60 percent of students in the nation's high schools did not continue their educations, 37 members (45%) of Carl's graduating class continued theirs. About one out of four of these students finished college.

Those students who chose to continue their educations were usually encouraged by their parents since for immigrants as well as native-born Americans, the hope for the future was considered to lie in their children. The hard-working manual laborers were strongly interested in the academic achievements of their children.

Of the four Anderson children, only Carl Leonard continued with a higher education. Carl Oscar worked at the mines until he moved to Midland, Michigan, where he directed chemical operations of the Dow-Corning Company. Elsie married and moved to nearby Hurley, Wisconsin. Arthur also worked in the mines, and became a supervisor in the plastic division of the Dow Chemical Company in Midland.

Carl Leonard enjoyed good health during most of his school days although a ruptured appendix caused him to miss a month and a half of spring term during his junior year (April 13-June 2, 1917). An active child, he learned to ski at four years, under the watchful eye of his father. He used skis made by his father and he often practiced ski jumping. In 1913, when he was barely 12 years old, he competed and won his first national ski-jumping tournament. His love for the sport continued throughout his life.

While Carl was in high school, World War I developed. At first neutral, the United States entered the conflict three years later in April, 1917. On November 11, 1918, the armistice was signed and the war ended (Means, 1962). The short depression that followed left Carl Anderson without funds to continue his education so he worked at a variety of jobs for United States Steel Company. During the next six years he considered various career alternatives, including a career in politics. He was dissuaded from this choice by his friend, city councilman J. B. Patrick, who recognized in Carl a sensitivity to the welfare of others. Patrick encouraged him instead to pursue a career of service, "man's service to man", which Carl would later describe as his philosophy of life.

While awaiting an opportunity to continue his education, Carl was active in Ironwood athletics, skiing, playing semiprofessional football for the Ironwood Legionnaires, and playing baseball for the

Norrie Athletic Club. He managed the indoor arena of the Club for its first three years.

### College

As the United States began to realize its position of preeminence as a world power, spirits rose and the depression ended. "The 1920's were socially marked by the rise of jazz music, racketeering and gangsterism" (Means, 1962a, p. 154). They were also marked by an increase of interest in education, and ambitious youth sought new challenges in academic fields. Carl set out in the fall of 1924 to acquire his college education at the University of Michigan in Ann Arbor.

Ann Arbor was 13 years old in 1837, with a population of 2,000, yet it bid successfully against Detroit for the establishment of the University of Michigan. Forty acres of land were donated for the University site, and the College of Literature, Science and the Arts was opened in 1841. The first class was graduated in 1845.

When Carl arrived, the campus held 12,000 students. Since no dormitories existed, Carl was obliged to live in a rooming house near the campus where he paid \$11.00 a week for room and board. Tuition at the University of Michigan came to \$93.00 per semester. Over the next four years, Carl's living expenses, books and tuition averaged \$715.00 annually.

Carl earned extra money by working as a cashier in the Tap Room of the Michigan Union Building. Although Carl's love for athletics continued, he was not eligible to play on University teams because he had played semiprofessional football in Ironwood. He continued to ski, and entered three ski-jumping tournaments. In 1924, he earned a bid to join the United States Olympic Ski Team in the Winter Olympics held in Chamonix, France, but expenses and academic pressures forced him to decline the offer. At the Chicago International Ski Tournament held in 1927, he won second place. Carl's only serious skiing accident occurred at Lake Placid, New York, in 1925, when he fell and fractured his left forearm.

Carl's other recreational activities were limited to canoeing on the Huron River, and to attending various dances and the usual University social events. More important, Carl's cultural interests became strong when he attended the University. He attended operas, lectures and symphony concerts whenever they were available.

The University of Michigan Catalogue (1926, p. 191-192) gives some idea of the aura of the times when it describes some of its regulations:

The State of Michigan extends the privileges of the University, with only moderate charges, to all persons of either sex who are qualified for admission. It cannot be a patron of idleness or dissipation. Its crowded classes have no room except for those who assiduously pursue the studies of their choice, and are willing to be governed in their conduct and propriety. . . .

students not in their places at the opening of the semester must present written excuses from their parents or guardians for the delay . . . .

Carl was in his place when his classes began in the fall of 1924, and he rarely missed a class. He enrolled in the College of Literature, Science and the Arts, and earned a Bachelor of Science degree by completing 60 of the 124 credits required in the physical sciences, mathematics, and biology. The remaining 64 credits he completed in his major field, Education; and in his minors, Biological Science and Physical Education. He took courses in the School of Medicine; the School of Engineering; the Division of Hygiene, Public Health, and Physical Education; the College of Literature, Science and the Arts; and the School of Education. (See Appendix V for courses Carl studied at the University.)

Carl remembers his professors at the University of Michigan for many different reasons. His reservoir of knowledge in anatomy and physiology was the result of classes he took from Dr. Egbert Badgley, Professor of Orthopedic Surgery; and Dr. G. Carl Huber, Professor of Anatomical Sciences in the Medical School.

Carl was impressed with Dr. Clark Trow who taught Psychology of Learning in the School of Education. Dr. Anderson remembers that Dr. Trow was among the first of his teachers who approached his subject matter scientifically, requiring his students to perform experiments and research. Carl developed a project for

Dr. Trow on learning to type. He used four groups of nontypists, instructing them in various methods of typing. Then he studied the results of their progress utilizing a scientific research approach. The project stimulated his interest in research.

He took School Health classes from Dr. Warren E. Forsythe, and Epidemiology from Dr. Nathan Sinai. Dr. John Sundwall, the Director of the Division of Hygiene, Public Health, and Physical Education, was a scholarly man and a Utah Mormon. He was expert at soliciting new students for the Division. Carl's graduating class doubled in size from his freshman year, largely because of Dr. Sundwall's activities. Dr. Sundwall, Carl's advisor in graduate school, was also instrumental in placing Carl in his first college teaching job at Utah State College.

Carl's classes in the School of Engineering taught him skills he would later use as a sanitary engineer with the Michigan State Health Department. Dr. Harry H. Higbie, a Professor of Electrical Engineering, was jovially referred to by his students as "Horrible Harry Higbie" because he was an exacting and demanding professor. He taught Illumination and Photometry. Dr. Higbie expected the very best from his students, a philosophy which remains with Carl. Dr. Higbie used interesting teaching techniques. One which Carl remembers, was the method of projecting photographs he had taken of various classrooms, auditoriums, hallways, and laboratories in

other buildings on the campus. The class was expected to assess the illumination of the rooms and make constructive suggestions for improving them.

Another professor Carl remembers for his teaching techniques was Dr. William C. Hoad, Professor of Sanitary and Municipal Engineering, who taught the Water Works class. Dr. Hoad took his classes on field trips to sewage treatment plants in Ann Arbor and Flint.

Carl was a good student. Besides working in the Michigan Union Building, he also helped fellow students with term papers and projects. Carl's grade point average was high, in the upper two percent of his senior class of 1,690 students. He graduated "With High Distinction" in June, 1928.

### Conclusion

Carl Anderson was fortunate to have had the encouragement of his family and his teachers in his pursuit of higher education. Influenced perhaps by the death of childhood friends of tuberculosis, and steered by the advice of a respected friend, councilman J. B. Patrick, Carl determined to follow a career of service to his fellow man. After a six-year work period in Ironwood, Michigan, following



his graduation from high school, Carl began his university education at the University of Michigan, in Ann Arbor. He majored in education and minored in biological sciences and physical education. His undergraduate work prepared him well for future studies in the field of health education. On his graduation in June of 1928, he finally began his long career of professional service.

### III. EARLY PROFESSIONAL DEVELOPMENT

Carl Anderson's first teaching job at Grosse Ile, Michigan, and his marriage to Alyce E. Stapleton, were followed by four years of graduate school at the University of Michigan where he earned a master's degree and doctoral degree in public health. He gained valuable public health experience working in the state and county health departments of Michigan. In 1935 he left public health work for the classroom.

These early experiences, combined with ten years at Utah State College, and four years at Michigan State College, contributed to the shaping of his intellect and expertise in the field of health.

#### Grosse Ile

Carl began his professional career as a high school health instructor and coach at Grosse Ile, Michigan. Grosse Ile, approximately nine miles long, is one of numerous islands in the Detroit River. It is located about 15 miles from Detroit. When Carl arrived in 1928, the population of Grosse Ile stood at about 1,400. The largest industry was the Naval Reserve Aviation Station. Grosse Ile was a residential community with a high percentage of college graduates who worked in executive, management, and professional positions (Swan, 1968).

Carl's responsibilities at Grosse Ile included teaching both health and physical education classes; and coaching football, basketball and baseball teams. Although Carl's school was small (Class C), under his guidance, the basketball team won the right every year to compete in the state tournament. Robert B. Smith (1973), Superintendent of Grosse Ile School District, had this to say about Carl's success as a coach:

I know that Dr. Anderson was a very successful coach at Grosse Ile, in the early thirties and was highly respected in his field. He set enviable records with his teams. Grosse Ile was the smallest school in the area at that time and consequently had to compete with larger Class A and Class B teams who feared competing with Grosse Ile. . . .

In addition to his other coaching duties, Carl was asked to coach the boys' golf team as well. Since he was not himself a golfer, he met this challenge with some apprehension. However, during his last year at Grosse Ile he coached the team to a second place finish.

Part of Carl's success as a coach stemmed from his interest in young people, a characteristic he still retains. His willingness to help them improve their abilities is illustrated in a statement by Meg Bremer (1973), Editorial Coordinator of the News-Herald newspapers in Grosse Ile:

He was the first to teach me to swim. He took a few of us from school and began swim lessons at what we call 'The Hollow'. This is the Detroit River which, while the lessons were under way, was found to be contaminated and our lessons ended abruptly. I would guess that Dr. Anderson was responsible for terminating them. . . .

Carl was indeed responsible for terminating the swimming lessons. He was disturbed to observe that the Detroit River had become polluted by industrial plants, one of several factors which influenced him in his decision to leave Grosse Ile and to pursue a career in public health.

During Carl's second year at the high school, he met Alyce E. Stapleton, a young elementary school teacher who taught reading to pupils with educational handicaps.

Alyce Stapleton, who lost her parents when she was very young, was raised in Saginaw, Michigan, by her paternal grandparents. Her grandfather, a minister, encouraged her to attend Olivet, a private college near Lansing. From Olivet she received a Lifetime Teaching certificate in elementary education. Following her graduation, she taught for one year in Midland, and the next year at Port Huron, after which she took a position as an occupational therapist in the University of Michigan Hospital. In 1929, she moved to Grosse Ile and met Carl, her future husband (Anderson, 1974).

The stock market crashed in the fall of 1929, one year after Carl began teaching. During the depression which followed, education suffered as enrollments increased and funds decreased. Drastic reductions in curricula, personnel, and salaries made life difficult. Carl's original salary of \$2,800 a year was cut as the depression took its toll. Still concerned about the deaths of his high school

friends, the pollution of rivers, and the need for public health programs, Carl determined to return to Ann Arbor, to study for an advanced degree in public health.

### Graduate School

After finding living accommodations near the University, Carl sent for Alyce. They were married on August 23, 1930, in a small chapel at the University. By September, Carl had started classes. Alyce helped him whenever she could by reading his assignments and offering opinions of his work. She also was able to help them financially with a moderate inheritance she had received from her parents.

Graduate school days were busy ones for Carl. For a Master of Science in Public Health degree, he was required to complete one year of resident work, three months of practical field work, a final comprehensive and oral examination, and a thesis (U. of Michigan, 1931, p. 178). His courses included the following:

#### First Semester

Personal Hygiene  
Contagious Diseases  
Sanitary Chemistry and  
Biology  
Public Health Statistics  
Community Health Problems  
Municipal Government

#### Second Semester

Community Health Problems  
Public Health Law and Admin-  
istration  
Water Works  
Municipal and Industrial  
Sanitation  
Sewage Disposal Plants

At that time, the University of Michigan was pioneering in health education. The first courses were introduced in 1921, and under the

leadership of Dr. John Sundwall (Carl's advisor), the program expanded (Means, 1962b).

Carl's first experience with a public health department occurred when he fulfilled the three-month requirement of practical field work in Lansing during the summer of 1931. Lansing, a city of 90,000 inhabitants, is centrally located in Michigan's Lower Peninsula. It combines the political activity of a state capitol, the bustle of an industrial automobile city, and the even temper of a farming community.

Carl Reported to the Michigan Department of Health on the Old De Witt Road and introduced himself to the supervising Health Officer, Dr. C. C. Slemons.

The chief function of the Michigan Department of Health was to advise and aid local health departments which, in turn, rendered direct service to the people. The major technical functions of the department were concerned with vital statistics, communicable disease control, sanitation, public health laboratories, public health education, child hygiene and public nursing. Although Carl was impressed with this large parent organization, he believed he would probably want to work in a local health department where he could do the most good with individual citizens.

Carl returned to Ann Arbor in the fall to work on his thesis entitled, "History of the Mental Health Movement." He was graduated

in February, 1932, with a Master of Science in Public Health degree. In addition to this important event, another took place in Carl's life-- his first child, a daughter, was born on January 13, 1932. The Andersons named her Nancy Alice.

The depression and its toll on the job market offered little professional encouragement to Carl Anderson at that time. Because it seemed wise to remain in Ann Arbor, Carl and Alyce decided that he should continue his education in public health until he completed the doctoral degree.

The Graduate School at the University of Michigan required for the doctorate in Public Health a minimum of three years' work, supplemented by two summers of practical work in the field. The first year's requirements were similar to those required for the master's degree, so many of Carl's previous courses were accepted. (U. of Michigan, 1933). His doctoral committee was composed of professors from nine departments: Engineering, Political Science, Sociology, Statistics, Psychology, Bacteriology, Medicine, Education, and the Graduate School.

Carl worked during the summers of 1932 and 1933 at the Michigan Department of Health, then completed his dissertation entitled, "Incidence of/and Related Factors Concerning Epilepsy in the State of Michigan." In June, 1934, he was awarded a Doctor of Public Health degree.

### Public Health Department

Armed with his doctoral degree, Carl Anderson moved his family to Fremont, Michigan, to begin work in public health as a sanitary engineer. At that time the high death rate in the United States was attributed to such diseases as influenza, pneumonia, tuberculosis, gastroenteritis, and poliomyelitis (Lerner and Anderson, 1963).

Polio epidemics and tuberculosis were two major areas of public health staff concentration in Michigan when Dr. Anderson took his position. As a sanitary engineer, he worked with the Communicable Disease Department to investigate and study local epidemics, and to stimulate local tuberculosis prevention programs. He improved the tuberculosis X-ray program in the West Branch district by convincing the board of supervisors of the local health department of the need for chest X-rays. Carl pointed out to the board that many of the families in the district were on welfare because the father had tuberculosis and could not work. In this light, the board approved funds for the program. As a result, an interested physician in West Branch, Dr. Hugh Jardine, provided 2,000 chest X-rays to the health department for only \$1,000.

Dr. Anderson traveled extensively, often driving from 50 to 100 miles a day to investigate and study problems related to public water



supplies, sewage disposal, public eating places, and private home sanitation. What he found in the course of his investigations made him sensitive to the effects of human neglect and carelessness.

While Carl was working for the Michigan Department of Health during his graduate days at the University of Michigan, Dr. C. C. Slemons, the Health Officer, encouraged him to join the United States Public Health Service. During the early 1930's, funds from the federal government were allocated to strengthen state and local health departments. Carl became an officer in the United States Public Health Service and, from that time, part of his salary was paid by the State Health Department and the remainder by the United States Public Health Service.

What began in 1798 as the Marine Hospital Service in the Treasury Department, evolved into the Public Health and Marine Hospital Service in 1902. In 1912, the name was changed to the United States Public Health Service. This principal health organization in the federal government commissioned officers in the same manner as those in military services, since the Service was a semi-military organization. The Service is composed of a commissioned and a civilian corps. Physicians, dentists, sanitary engineers, public health nurses, pharmacists, and other health professionals make up the commissioned corps; while secretaries, clerks, and other nonprofessional civil service staff comprise the civilian

corps (Anderson, 1970).

Anderson was commissioned by the United States Public Health Service, and held his rank until 1935 when he left public health work. Years later (1949) he returned to Michigan and was recommissioned a Lieutenant Commander. He remained on inactive reserve until 1964.

Dr. Anderson evaluated his life in 1935 in light of a quotation of Hillel's who said over 200 years ago (Anderson, 1970a, p. 60): "If I am not for myself, who is for me? If I am for myself alone, what am I? If not now, when?"

Dr. Anderson grew weary of traveling and the hours spent away from his family. An ambitious man, Doctor of Public Health Carl Anderson, was dissatisfied with his salary. He now made much less than his beginning salary in Grosse Ile when he was just a high school teacher with a baccalaureate degree. Also concerned about the increased need for training public health workers, he decided to contribute to health education rather than to continue efforts in public health work.

Health education as a specific area in the curriculum of the nation's schools both suffered and prospered from the depression. Because it was a comparatively new field, health education was sometimes discarded as a "frill" to be replaced by more traditional courses. The 30's was a decade of transition for school health

education. Progress was made nationally in the preparation of curricula and in recognizing the importance of health education in the broader educational scheme. Teacher preparation courses in colleges and universities were also being developed (Means, 1962c).

Interested and attracted by this progress, Dr. Carl Anderson accepted a position as an Assistant Professor in the Department of Physiology, Public Health, and Hygiene at Utah State Agricultural College in Logan, Utah.

### Utah

The Andersons arrived in Logan during the summer of 1935. This small community, located 85 miles from Salt Lake City, had a population of about 12,000. Utah State, a land-grant college, is situated on a broad hill overlooking the city, commanding a view of the Cache Valley and the surrounding mountain ranges (Utah State College, 1935).

Dr. Anderson began his work with the Department of Physiology, Public Health and Hygiene, one of eleven departments in the School of Arts and Sciences at Utah State College. Needing 30 credits for a major, students in Public Health were expected to take bacteriology, organic chemistry, and mathematics. Courses in nutrition, physics, psychology, recreation, sociology, and zoology were strongly recommended supporting courses (Utah State College, 1935a).

Dr. Anderson taught many courses during the next ten years including Mechanical Anatomical Analysis of Activity, Personal Hygiene, School Health and Safety, School Health Programs, Mental Hygiene, Advanced Physiological Hygiene, Public Health Seminar, and Neuroanatomy.

Carl Anderson's teaching and his remarkable memory for names earned him the respect and admiration of his students. Fay Moser, a colleague in the department, remarked: "He could make textbook subjects come to life. He earned his student's admiration and trust . . . ." Dr. Anderson was voted Utah State's most outstanding teacher of the year in 1939 and 1940 (Moser, Anderson, 1973).

Dale Nelson (1973), a student from 1938 to 1942, said, "Dr. Anderson was the reason I minored in physiology, and he was my favorite teacher." Dale was a distance runner at Utah State College who suffered from hypertension. Dr. Anderson spent many hours with him on and off the track, encouraging and helping him with a special gelatin diet to improve his condition. Dale turned in record performances at Utah State College. Indeed, Carl Anderson realized that a life's goal of service brings gratification. "He likes people, and enjoyed working in their behalf . . . he was a man of unlimited energy" (Waters, 1974).

Dr. Anderson became a full Professor in 1941, and assumed

the duties as Head of the Department of Physiology, Public Health, and Hygiene in 1943.

Dr. John C. Carlisle, Head of the Department of Education at Utah State College, worked with Dr. Anderson in developing the curriculum of the Physiology Department. Dr. Carlisle (1974) said: "The Department of Physiology, Public Health, and Hygiene grew substantially in enrollment and stature under Dr. Anderson's direction."

As one of ten non-Mormon members of the staff at Utah State College, he faced conflicts and challenges while leading his department.

A strong defender of his department, Dr. Anderson worked hard to transfer health courses such as Personal Hygiene and School Health Programs into his department. These courses had traditionally been taught in other departments.

Dr. Anderson was a frequent speaker at faculty meetings. Dr. J. Duncan Brite (1974) related an incident at a faculty meeting in 1945 at which he and Dr. Anderson were present:

Carl asked for the floor intending to say a few words. He started to say 'I would like to digress for a minute' but slipped and said 'I would like to transgress for a minute' whereupon one of our punsters, George Jensen, sitting behind him, said 'You can't transgress very much in only a minute Carl. . . .

Living in an area of strong Mormon faith was not always easy for the Anderson family. Ninety percent of Logan's population were Mormon, members of the Church of Jesus Christ Latter-Day saints. The remaining ten percent were Protestants, Catholics and Buddhists. Baptized a Lutheran as a boy, Carl Anderson attended the Presbyterian church in Logan because there was no Lutheran congregation. He was active in the affairs of the community particularly with the Freemason Lodge.

This oath-bound fraternal order was derived originally from the medieval fraternity of operative stonemasons and cathedral builders. The main stem of the order, variously referred to as Craft, York, Symbolic, or Blue Masonry, consists of three degrees. Entered Apprentice, Fellow Craft and Master Mason (Masonic Fraternity, 1973).

Dr. Anderson was initiated as an Entered Apprentice December 18, 1929, in Trenton, Michigan. He passed to Degree of Fellow Craft on March 5, 1930, and achieved the degree of Master Mason on March 26, 1930. He was demitted from Trenton Lodge No. 8, F. & A. M. to Harmony Lodge No. 21 Free and Accepted Mason, on December 14, 1937 (Moore, 1973).

Raymond Moore, Secretary of Harmony Lodge, said:

Dr. Anderson was a vigorous and articulate leader of the Lodge. He demonstrated his ability to lecture when he presented the history of Freemasonry to a lodge in Ogden. On another occasion, he prepared and presented a 9-page document entitled 'Mormonism and Freemasonry'. It served for many years to instruct newly-initiated Brothers on the curious coexistence in Utah of these two organizations.

Dr. Anderson was appointed chairman of the Masonic Educational Committee and was elected Junior Warden in 1941, Senior Warden in 1942, and Worshipful Master in 1943 (Dorst, 1973). He was devoted to Harmony Lodge and remained interested in its development long after he left Logan. In a letter to Raymond Moore on January 2, 1966, Dr. Anderson said:

Please accept my sincere thanks for the subscription to Utah Mason. Be assured I enjoy reading it. Names may change but the fraternal spirit remains pretty much the same. I sincerely hope that the new names represent youth . . . .

He retained membership in Harmony Lodge as a Past Master, although he continued to be active in other lodges.

About this time, Dr. Anderson, composed several articles for professional magazines and journals. In 1936, his article, "Incidence of Related Factors Concerning Epilepsy", and "The Gravity Method for Correction of Posture Disorders" appeared in the Journal of Mental Hygiene and the Journal of Health and Physical Education, respectively. In 1941, "Nature of the Nerve Impulse and Brain Wave" appeared in the Journal of Public Health. Dr. Anderson also wrote a monograph for the Utah State Department of Public Instruction,

entitled "Alcohol, Tobacco and Marihuana", in 1941.

During the summer months, Dr. Anderson was invited to be guest professor at Brigham Young University in Provo, and the University of Utah in Salt Lake City. Because of his interest in mental hygiene and biochemistry, he continued his studies at the University of Minnesota during the summer of 1941.

While Carl Anderson continued his work at Utah State College as professor, department head and advisor to pre-medical students, another major war began to emerge. The 1939 declaration of war by Poland, France, and Great Britain was an omen to the United States. In Europe weak nations were overwhelmed. On December 7, 1941, Pearl Harbor was attacked by Japanese aircraft and, the United States was committed to war (Means, 1962d).

At home the Selective Service Act had passed, drafting eligible men into the armed services. During the war the government was the biggest single employer in the state of Utah. Federal defense activities took place at several military bases and supply depots throughout the state. Dr. Anderson worked evenings and weekends in the war effort as a supervisor of supply distribution at the Ogden Supply Depot. German prisoners from a nearby prisoner-of-war camp near Ogden worked in the depot and Dr. Anderson, because he had learned German at the University of Michigan, acted as an interpreter. For the military personnel who might otherwise have found



life lonely during their training at Hill Air Force Base, he organized recreation, particularly ski trips to Bear Lake Summit.

In May, 1945, the German armies capitulated. Three months later, the Japanese surrendered following the atomic bombings of Hiroshima and Nagasaki. At the same time, Dr. Anderson at 44 years of age, once again re-evaluated his life. It was difficult living as a Protestant in a predominantly Mormon community, especially for the children. Janis Altha, born in 1936, and Hayes Leonard, born in 1939, were still too young to be aware that they were different from their Mormon friends, but Nancy felt the hurt of children in junior high school who chided her for attending the Presbyterian church. Carl was no longer needed at the Ogden Supply Depot. The big war was ended and the Andersons decided that this was the time to move.

In 1945, the Andersons sold their home and furnishings, and drove to New York. At Cortland State Teachers College, Dr. Anderson taught health for one year in the Department of Health and Physical Education. In the fall of 1946, he accepted a position as Associate Professor in the Biological Science Department at Michigan State College of Agriculture and Applied Science.

### Michigan

After moving from New York to Michigan, the Andersons lived in Williamston, Michigan, ten miles from East Lansing. In 1947, they moved to East Lansing to be closer to Carl's work and the college community. East Lansing, 90 miles from Detroit, and three miles east of Lansing, had banned the industry that its parent city encouraged. Activities centered around Michigan State College. During World War II the number of regular students dropped, but enrollment did not decline too radically because young military men came to the college to study officer training. After the war, the enrollment had surged from 5,300 in 1945 to 13,300 in 1946. From that time enrollment increased slowly, stabilizing itself at approximately 16,000 for the next four years. Dr. Anderson joined the staff at Michigan State College during the post-war rush, at home once again in his native state. His salary was \$3,800 and his responsibilities were in the Basic College.

Michigan State College had started its program of basic general education for all students with the opening of the fall quarter in 1944. The basic general education included the study of man's relationship to the physical, biological, and social sciences. The program was designed to help students who were uncertain about their educational plans, giving them opportunity to explore broad areas of knowledge

and experiences. Curriculum for the Basic College students included seven comprehensive core courses, required introductory and exploratory courses, military science for men, and physical education for men and women.

The seven basic courses making up the departments of the Basic College during Dr. Anderson's tenure were (1) written and spoken English, (2) Biological Science, (3) Physical Science, (4) Effective Living, (5) History of Civilization, (6) Social Science, and (7) Literature and Fine Arts (Michigan State College, 1949).

Dr. Anderson was one of a staff of 28 in the Department of Biological Science. He taught the Biological Science course in the Basic College. His classes were extremely large. He worked with Dr. Marvin Solomon, Dr. Carl Stiles, and others on the staff, to determine what would be the most effective method of teaching these classes of 300 or more.

Although similar research had previously been done with smaller groups (Downing, 1925, Kahn, 1937) they decided to divide their classes into (1) lectures only, (2) laboratories and lectures, and (3) laboratories only. Following this experimentation for three years, they determined that the laboratory-method was most effective for their department at Michigan State College.

Dr. Anderson was also responsible for Physical Science classes in the Physical Education Department. His most conspicuous

problems were large classes, and the crowded, cramped conditions of the facilities. He was obliged to spend his office hours in the belfry of the bell tower of his department for three years, before he was able to move to a more spacious office.

Dr. Anderson had not given up his writing. In 1949, three articles were published: "Reduced Penetrance in the Inheritance of Cortical Cataract" appeared in the Journal of Heredity, "Cholesterol Factor in Convulsions" appeared in the Quarterly Review of Psychiatry and Neurology, and "Experimental Production of Convulsive Seizures" was published in the Journal of Nervous and Mental Disorders. A monograph, "Basic Biological Science" to be used by students in his Biological Science classes was published by the Michigan State College Press.

Dr. Anderson was not entirely satisfied at Michigan State College. The growing enrollment, the poor facilities, and the lack of opportunity for immediate advancement offered little encouragement for his future. His experience at Utah State College as a department head he could not envision repeating at Michigan State.

In spite of his successful work at Michigan State College as a professor, Dr. Anderson again responded to the lure of the West. In 1947, he was interviewed by Dr. N. P. Neilson, Director of the College of Health at the University of Utah. Unfortunately, the job of health educator had been filled. Dr. Neilson (1973) described

his meeting with Dr. Anderson this way:

Dr. Anderson came into my office in the spring of 1947 for an interview and I was greatly impressed. We had already made a commitment, otherwise I am sure we would have offered the position in health education to him.

In the meantime, Dr. Clair V. Langton, Director of the Division of Physical Education at Oregon State Agricultural College in Corvallis, Oregon, contacted Dr. Anderson. In 1949, he convinced Dr. Anderson to move to Oregon.

#### Conclusion

The first 17 years of his professional career in Michigan as teacher, graduate student, and public health worker, combined with his work in Utah, New York, and Michigan, as a professor and department head provided Dr. Carl Anderson with the experience, the expertise and the ambition to pursue the longest, most challenging position of his career: Head of the Department of Hygiene and Public Health at Oregon State University in Corvallis, Oregon.

#### IV. OREGON STATE UNIVERSITY

During the 1950's and 1960's, Dr. Anderson's efforts were mobilized toward the improvement and expansion of a quality health department at Oregon State University. He taught thousands of students and advised many graduate students.

During his 22 years at Oregon State University, Dr. Anderson developed a professional preparation program in Health which resulted in the awarding of advanced degrees. He wrote textbooks and test manuals, taught general hygiene classes by television, and was prominent in the Faculty Senate for 15 years, twice serving as its vice-chairman. He was chairman of the following committees: the Advancement of Teaching, Faculty Day, and Radiation Safety.

Dr. Anderson helped develop an Honors Program in the School of Science and taught The College Student course in the College and University Teaching program for six years. He developed two research instruments: the Neuromuscular Chronometer, and the Displacement Tank. In 1960, he took a sabbatical leave acquiring additional background information for his textbooks. Carl Anderson was an active, energetic man, who earned the respect and admiration of his students and colleagues.

### Oregon

One year prior to the Korean War, on August 16, 1949, Dr. Carl Anderson brought his family to Oregon. Once more he was motivated to meet the challenge of a new position as a department head. When the Andersons reached Corvallis, they were immediately pleased with the mild sub-coastal climate, and the winds that dispelled the summer heat. Corvallis, located 85 miles south of Portland and 50 miles east of the Pacific Ocean, had a population of 15,000 in 1949.

The college at that time had a student population of 7,000 and a teaching staff of approximately 700. The campus had expanded its facilities with many temporary buildings which were brought in from nearby military posts to accommodate the large number of post-World War II students. Since its humble beginnings as Corvallis College in 1858, Oregon's land-grant college experienced several name changes; the most recent in 1961 when it became Oregon State University.

### History of Health Education at Oregon State University

When Carl Anderson joined the faculty of Oregon State College as Head of the Hygiene and Public Health Department, he became part of a developing program of health education which had begun in

1910 when general hygiene courses were first offered to women students. Five years later, the course was offered to male students. In 1929, President William Kerr appointed Dr. Melvin Isaminger to be Head of the Department of Hygiene and Public Health. Dr. Isaminger had initiated a program of health service on campus and, for the first time, health examinations were administered to all incoming students. By 1931, general hygiene was required for all students. In March, 1932, the newly-created Oregon Board of Higher Education reorganized health education on the Oregon State campus, allowing for Lower Division work in health, and restricting Upper Division courses in this field (Division of Physical Education, 1966).

At the time of Dr. Anderson's arrival, it was possible for students to elect general and advanced hygiene while major work in health was available at both the undergraduate and graduate levels. However, this work was available through other departments. The health major was developed by means of courses offered in other schools and departments using their number designators. An example of this was the School Health Instruction Course in the Science Education Department, designated as SEd 321 (O.S.C. Catalogue, 1952-53). In 1970, these courses were officially recognized as health and given "H" designators.

Dr. Anderson taught for several years in a variety of schools



and departments, his courses included Human Biology, for the Zoology Department; Sanitation, Community Health Problems and Epidemiology in the Bacteriology Department; Health Education in the Science Education Department; and Safety and First Aid in the Education Department.

In 1949, the intention of Dr. Clair V. Langton, Director of the Division of Physical Education, and Dr. Anderson's immediate superior, was to reorganize the Division, and to expand the health program. Although Dr. Langton's position in the Division was held subsequently by other men, James V. Dixon, Dr. Emery N. Castle, and Dr. James W. Long, the health program continued to develop. Dr. Anderson was a leader in the progressive expansion of the Physical Education health program, serving as head of the Department of Hygiene and Public Health. Since Dr. Anderson's arrival in 1949, the Department has experienced two name changes. In 1957, it became the Department of Hygiene and Environmental Sanitation; and in 1970, the Department of Health. In 1970, the Division of Physical Education also became the Division of Health and Physical Education.

#### Development of Professional Preparation in Health Education

College and university health programs in the United States

received much attention during the fifties and sixties. School health education made significant advances toward the solution of problems of teacher preparation. In 1950, a report of the First National Conference on the Undergraduate Professional Preparation of Students Majoring in Health Education revealed that 38 institutions in 20 states, including the University of Oregon and Oregon State College, had organized health education major programs. In 1952, forty-four teacher education institutions offered majors in health education and ten of these also offered majors in public health (Means, 1962c).

As the health education program at Oregon State College developed, it was the subject of extensive study, experimentation, and dedicated staff effort. The program was designed to prepare elementary and secondary educators for the teaching of health.

In a speech to the International Professional Preparation Conference in Philadelphia in 1962, Dr. Anderson discussed the professional health preparation program at Oregon State College. He first described the requirements for teaching in Oregon as follows:

The State Board of Education regulations provides for regular health teaching in each elementary school grade, a half-year of health instruction in the junior high school and a full year in the senior high school.

In the self-contained elementary school classroom, the teacher is responsible for health teaching. In the junior

and senior high school, health is taught by a subject matter specialist with an undergraduate health major or minor or with graduate preparation in health education.

A candidate for teaching must have either of two certificates. The first, a Basic Teaching Certificate, which is granted by the state when an applicant with a baccalaureate degree has completed certain subject matter and professional courses. This certificate is valid for only five years. During that time the teacher must have completed one year of approved study, in order to qualify for the secondary certificate, the permanent Standard Teaching Certificate (Anderson, 1962, p. 696).

### Undergraduate Preparation

Dr. Anderson continued to explain the increasing difficulty of the professional preparation program because of the strict requirements for teachers in the state of Oregon. At Oregon State College the prospective elementary teacher of a self-contained classroom was offered three professional health courses: General Hygiene, Healthful School Living, and Health Education. During their senior years, student teachers taught health and assumed the health services responsibilities required of elementary school teachers.

To those who wished to become health coordinators, additional graduate level work in health was offered, including work in school health problems, child growth and development, community health, nutrition, first aid, and safety education.

While preparing to be high school health teachers, the health education majors took general courses in the fields of English

composition, literature, speech, psychology, sociology, economics, history, philosophy, political science, and foundation science courses. Foundation science courses basic to health science constituted more than one-fifth of the student's academic work. These courses included chemistry, human biology, human anatomy, human physiology, and microbiology. The following professional health education courses made up one-fourth of the program:

General Hygiene	Nutrition
Introduction to Health Education	School Health Instruction
Health of the School Age Child	Safety Education
Mental Health	First Aid
Physical Growth and Development	Community Health Promotion
	Public Health Agencies and Services
	Family Life Education
	School Health Services

Such education courses as Fundamentals of Education, Psychology of Learning, Psychological Development, and Teaching Methods were required for the secondary school basic teaching certificate. In addition, one full term of student teaching and community field experience completed the health education major's requirements.

Health education minors were required to complete all of the professional courses but not all of the foundation sciences required of a major. Student teachers usually divided their time between health and some other subject (Anderson, 1962a). By 1971, independent majors in community health and in environmental health were offered.

### Graduate Preparation

On May 27, 1964, graduate degrees were approved for the Department of Hygiene and Environmental Sanitation. Dr. Anderson and his staff developed suitable curricula for the graduate programs.

The staff determined that core courses for the Master of Science and Master of Education degrees in health education would consist essentially of School Health Problems, Healthful School Living, Special Problems in Child Health, Sex Education, Community Health Problems, Problems in Disease Control, and Audio-Visual Instruction. The remainder of the work for the master degrees would consist of electives in health research, a thesis being required for the Master of Science degree, and extended course work for the Master of Education degree. By the time of Dr. Anderson's retirement in 1971, four advanced degree programs in the field of health were offered to students at Oregon State University. They were the Master of Education: Health Education; Master of Science: Education; Master of Arts: Education; and Master of Arts: General Studies. These study programs prepared students to become secondary health education teachers, directors of school health programs, and health administrators. Many students progressed into public health education with official and voluntary

health agencies, and some into environmental health (Koski, 1973).

Doctoral degree programs available through the School of Education included graduate work in health. Both Doctor of Education and Doctor of Philosophy candidates completed the customary course work and a research project on which a thesis was written. These graduates could become college teachers of school health, environmental health or public health; or they qualified to accept positions as administrators in public health agencies (O. S. U. Graduate School, 1970).

### Environmental Health and Community Health

When the Hygiene Department became the Hygiene and Environmental Sanitation Department in 1957, Dr. Anderson sought a program for students in environmental health and community health.

Dr. Anderson reported that he could not forget his own work with the Michigan health departments, the countless hours spent driving the country roads, typhoid epidemics, and the polluted Detroit River at Grosse Ile. He knew that voluntary health agencies and community health departments desperately required professional personnel who could effectively promote health principles.

Long before ecology was a term used in everyday conversation, Dr. Anderson became aware of such problems as the pollution of the nation's waterways. He witnessed, with great apprehension,

the annual field burnings in the Willamette Valley, and was concerned about the eventual effects of air pollution upon the citizens of the valley. He anticipated pollution control, new paramedical fields, and the advent of national health insurance--programs which would require additional professionals in public health. He envisioned a department that would prepare students to become not only health education teachers, but also sanitarians, health agency workers, and administrators in community health organizations.

Many of Dr. Anderson's plans for the Department were realized as more and more courses were developed and added to the program. To improve the curriculum, he worked closely with his staff, the deans of other schools, and Dr. Henry Hansen of the Graduate School to improve the curriculum. In addition to existing courses in school health education, new courses were added in community health and environmental health. By the early 1970's, 29 courses became available to undergraduate and graduate students in the Department. (See Appendix VI for courses offered by the Health Department.)

#### Department Head

The Oregon State University Faculty Handbook (1970, p. 55) described a department head/chairman as:

. . . an appointed officer of academic administration directly responsible to the dean of the school or the director of the division for the supervision of all matters falling within the cognizance of the department . . . for the recruitment, nomination, and evaluation of faculty . . . .

From 1949 to 1971, as Head of the Health Department, Dr. Anderson was directly responsible to four directors of the Division of Health and Physical Education. Dr. James W. Long (1973) said about his accomplishments,

Dr. Anderson has been extremely successful and has exemplified a high degree of performance in instruction, research, creativity and services. As Health Department head, he developed an outstanding undergraduate and graduate program in health, including three areas of school health, community health and environmental health. Through this vehicle, he has been responsible for training thousands of young people . . . .

At the beginning of his tenure at Oregon State, Dr. Anderson shared offices with Dr. Henrietta Morris and Walter Adrian in the men's gymnasium building. As the health program expanded, the staff increased, reaching its peak in 1969 with ten professional staff members whose degrees were earned in 18 colleges and universities. All senior staff members held doctoral degrees. All had health education backgrounds, and most of them had public health experience, for the Department recognized the need for coordinating public health and health education.

Chairman Dr. Anderson encouraged his staff to write, publish, do professional research, and to become involved in public service



activities of the community, state, and nation.

The Faculty Handbook (1970a, p. 55) continued:

. . . the department head is responsible for all curricular  
and course concerns; course assignments and scheduling  
. . . .

With the increase in courses came new staff members. New professors in the Department were carefully scheduled by Dr. Anderson in more than one section of a class, orienting the new professor to his new environment and reassuring him that he would be prepared to teach new courses without undue stress. Dr. Anderson also scheduled his staff to have one or two new classes every year, so that in a five-year span a staff member would have taught from eight to ten different courses. Dr. Gordon Anderson (1973) said, Dr. Anderson expected his staff to develop professional competencies in all phases of the health program." Still remembering his own classes at the University of Michigan when his professors sometimes missed class to attend meetings, Dr. Anderson prepared his staff to teach in as many areas as possible. This would enable them to fill in for others or to teach new courses in the event that staff changes occurred.

The expansion of the health program created a work burden for the senior staff members, so in the mid-1960's, the Department offered teaching and research assistantships to graduate students. Assistants taught first aid laboratory classes and driver education

laboratory classes for stipends and reduced university tuitions.

This practice permitted expansion of course offerings, but Dr. Anderson remained convinced that professional courses were best taught by senior staff members. Dr. Anderson, referring to his staff of teaching assistants in the biological science laboratories at Michigan State, recently said, "They were a mixed blessing. Some of them did not know much more than the students."

The Hygiene and Environmental Sanitation Department gained viability as it developed new curricular offerings during the summer sessions, short courses, seminars, and workshops, and class sizes increased in the areas of smoking and health, drug use and abuse, and in safety education. New Oregon State teacher requirements in health education stimulated the development of more courses for undergraduates seeking certification in health education and for graduate students completing their requirements for Standard Teaching certificates.

In conclusion, the Faculty Handbook (1970c, p. 55) says:

The department head provides academic leadership to the members of his department and endeavors to facilitate the conduct of their duties. In turn, he is expected to solicit and rely heavily on their counsel in the development of departmental programs and policies . . . . Staff meetings are held regularly or on call of the department head who is the presiding officer.

Early in each school year, Dr. Anderson conducted staff meetings and thereafter whenever he felt that they were needed. Important issues were studied and discussed by all staff members and all had a voice in policy decisions. Recalling those meetings Dr. Roy Foster (1973) said, "they were usually very informal and low key." Committees were often appointed by Dr. Anderson to accomplish the work of the growing department. Several institutes and conferences were sponsored through the committees including the following:

- Smoking and Health Institute - April, 1963
- Institute on Cardio-Vascular Health - June, 1963
- Breath of Life - February, 1965
- Ins and Outs of Respiration - February, 1966
- Gerontology Institute on Aging - May, 1966
- Chromosomes and Chemistry Conference - April, 1967
- Exercise and the Heart - April, 1967

Dr. Anderson's rapport with his staff was based on mutual loyalty and respect. The following characterizations of Dr. Anderson made by associates and colleagues illustrate his success as a department head. Dr. Arthur Koski (1973), present Department Head, said, "he had the capacity to keep up a full instructional load and administrative responsibilities at the same time." Dr. Gordon W. Anderson revealed, "he had concern for the professional welfare of the staff and their status in the university." Dr. Roy Foster (1973a) said, "he provided competent, intelligent leadership to the department and program that made a significant impact on Oregon and nationally."

Dr. Herman Gawer (1973) commented, "he was willing to assist and help others with their professional problems."

Dr. John Ellis (1973) remarked, "Dr. Anderson was not a timid man. He was quietly efficient as an administrator but he spoke what was on his mind. He spoke when there was something to be said, made it brief and to the point." According to Dr. Robert Houston (1973): "He might have differences with a staff member but issues would be aired and forgotten. He always stood behind you and fought for staff rights." Said Walter Adrian (1973) about Dr. Anderson, "he had a thoroughness in preparation and presentation of materials combined with an interesting sense of humor."

About his scholarly perseverance, Dr. Ellis (1937a) remembered, "he used the library almost daily; he was a scholar." He described Dr. Anderson's academic philosophy as follows: "When a teacher ceases being a scholar, he no longer is a teacher." Dr. Houston (1973a) commented upon Dr. Anderson's depth of knowledge by saying "the one character trait which impressed most people was his great memory." He cited an example of this about a class Dr. Anderson had just completed:

Attendance was not taken in the class. At the end of the term, a student was discussing his performance with Dr. Anderson who, without benefit of written record, was able to accurately tell the student, not only how many classes he had missed, but when he had missed them.

The following evidence and observations indicate that the department and some staff members were positively influenced by Dr. Carl Anderson.

Professor Anderson's influence in the Department of Health can be measured, in part, by the increase in course offerings from approximately 10 in 1949, to 29 in 1971. His work with the health curriculum at Oregon State University was recognized by the State Department of Education. For a number of years he served on a Joint Staff Committee to develop the health curriculum in Oregon schools and teacher certification requirements for health education. As a result, professional preparation courses were continually added to the department. Major changes in the requirements of teacher certification occurred shortly after his retirement.

His energetic promotion of the graduate program resulted in an increase of doctoral candidates majoring in Education with minors in the areas of health education, community health and environmental health. From three to five students per year were awarded doctoral degrees during his last five active years.

Staff members were also influenced and encouraged in their interests by Dr. Anderson. Dr. Gordon Anderson shared his interest in the curriculum development in Oregon schools. Both worked for the State Department of Education on committees to develop handbooks of health instruction for elementary and secondary schools.

Dr. Arthur Koski shared Dr. Anderson's influence through a mutual interest in the problem of smoking and health. Dr. Anderson's experience with the Oregon Interagency Committee on Smoking and Health encouraged development of institutes on smoking. In 1970, Anderson encouraged Dr. Koski to take a sabbatical leave to continue his studies by taking a position with Smoking/Research San Diego. This program was sponsored by a United States Public Health Service grant to the San Diego County Medical Society.

#### Professor Anderson

- fantastic memory, excellent preparation and presentation
- tests fair, original and comprehensive
- exceptional recall for facts
- sensitive to the needs of students

These comments from his former students illustrate some of Professor Anderson's memorable traits. Other students recalled that, in a voice that tended to drone, Dr. Anderson frequently called upon them to remember too many details.

Professor Anderson taught more than 22,000 young people at the Oregon State campus, and 3,000 in the Division of Continuing Education and at Oregon College of Education during his 22 years at the University. His teaching load averaged more than nine credit hours per term. He was the major professor for 122 master and



Figure 2. O. S. U. Department of Hygiene and Environmental Sanitation staff, 1968.  
Back row (L to R) George Markham, Gordon Anderson, Roy Foster, Robert Houston, John Ellis, Carl Anderson.  
Front row (L to R) Arthur Koski, Herman Gawer, David Phelps, Leonard Gibson, Russell Whaley

nine doctoral candidates.

Evidence indicates that Professor Anderson was appreciated by his students. Excerpts of letters from students describe his knowledge as "always being up-to-date on any phase of public health . . . having a nearphotographic memory, but he didn't scare you out of class with his intelligence, . . . blending theory with reality with just enough pragmatism so as not to stifle the initiative of the idealist."

When he lectured, Professor Anderson emphasized what he considered most important and frequently condensed material of lesser significance. This sometimes made it appear that he was not knowledgeable in a specific area, which was rarely the case. Jan Underwood (1973), a former master's advisee, illustrated this point:

In a graduate course Dr. Anderson went briefly over a subject. A student in the class felt that this brevity was a lack of knowledge. The student, trying to put Dr. Anderson on the spot, questioned him further. With no hesitation and with his usual calmness, Dr. Anderson proceeded to fill in the details of that particular subject. He quoted facts and figures as though they were coming off a chart.

A similar incident took place one summer in a Sex Education class attended by this writer. An older student, attempting to intimidate Professor Anderson, asked many irrelevant questions about the physiology of reproduction. Without benefit of notes, the professor delivered a learned and highly detailed discourse on male



reproduction. As he spoke the class silently communicated their appreciation for his brilliant performance with approving nods and smiles to one another.

Dr. Anderson never missed a class because of illness or injury during his years at Oregon State University. He conducted a gerontology class in which the writer was present, in obvious pain from a fractured finger he had suffered the night before.

Dr. Richard Schlaadt (1973), a former doctoral advisee, who became an Associate Professor of Health at the University of Oregon, expressed Dr. Anderson's genuine concern for students when he said, "I always felt he was my friend first, then my advisor."

Other former students commented:

--- the impact of his friendliness has been hard to measure

--- he had time for everyone

--- no matter how busy he was he always had time for a student if he had a problem.

On the campus, Dr. Anderson was usually seen walking with a confident, youthful gait which reflected his indefatigable spirit. He was a gentleman of the "old school" and always correctly observed the social amenities. Don McAfee (1973), a former doctoral advisee, said, "Although he enjoyed people, there was a certain formality about his personality." Professor Anderson was not without humor, however, which he revealed by a smile or a quick

retort. Dr. Ronald Rhodes (1973) of Brigham Young University, a former doctoral advisee, stated:

Being from Utah I was unaccustomed to the amount of rainfall experienced in Oregon's western regions. I enjoyed chiding Dr. Anderson about drippy clothes and wet feet. Finally, on one occasion, he retorted with 'well, at least you don't have to shovel it.'

Dr. Anderson frequently demonstrated his remarkable memory for names. Stuart Fors (1973, a former student said "I feel good because, even with all the students he has to know, he will recognize me, and call me by name."

It is unrealistic to say how much one individual influences the life of another. From her observations, and evidence shown in response to inquiries, this writer believes that many of Dr. Anderson's students were positively influenced by him to some degree.

Jan Underwood (1973a) who became a health teacher and coach at Gilchrist High School in Gilchrist, Oregon, remarked:

As a teacher myself, I now try to adopt much of Dr. Anderson's philosophy, in that I try to see how many students I can pass, rather than fail. When a student passes, we have done our job . . . . I never heard Dr. Anderson say that, and maybe he never really thought about it, but that was just him, and he lived it.

. . . I would never have attempted graduate school had it not been for the confidence he gave me in his classes . . . he gave me good guidance and stimulated me to do my best work.

Juanita Browning (1973), a public health nurse employed by the Indian Health Service was assigned to the Chemawa School

Health Center in Salem, Oregon. She was also a master's advisee of Dr. Anderson's when working with Indian children, she found it difficult to motivate them to maintain their health through good health practices. About Dr. Anderson, Juanita said, "I feel that Dr. Anderson's emphasis on the need to motivate students to want to promote and maintain their health greatly affected our school health program."

Terrence Vaughn (1973), a former health teacher at Pine Eagle High School in Oregon continued his education, becoming a guidance counselor. He remarked: "Dr. Anderson's concern for his students impressed me and eventually led me to the field of guidance."

Beth Inman (1973) became a coordinator of health service in the Pomona, California, public schools. She commented:

I believe I'm considered a very progressive administrator of a health program. . . . Dr. Anderson contributed to my self-confidence, my understandings of the health field, the development of my skills in establishing direction, management and dealing with problems.

Norman Hoffman (1973), an Associate Professor of Health Education at Bakersfield College in California, commented:

Dr. Anderson helped give me a feeling of intellectual confidence. The manner in which he presented his subject matter also helped me assimilate knowledge for use as a model in my own teaching.

### Textbooks

Alyce Anderson once remarked that "Carl was born with a pencil in his hand" (Ellis, 1973c). Writing was a natural talent which had been encouraged by his high school English teacher. He wrote several articles for scientific periodicals while he was employed in Utah and Michigan. By 1951 he was ready to write his first book. At that time, in Dr. Anderson's opinion, few good college health textbooks were available. He wanted a book to use as a text for the general hygiene classes at Oregon State, so he and Dr. Clair V. Langton co-authored Health Principles and Practice in 1953. Dr. Anderson revised the text alone after the first edition, and he also prepared a test manual to accompany it. The test manual, composed of 1,400 objective-type questions, represented 20 test patterns. In 1974, the seventh edition of the book was once more in the process of being updated.

Dr. Anderson wrote another book in 1953, entitled Physical and Emotional Aspects of Marriage, a text for young men and women which was used for several years in some colleges and universities. Not as widely accepted as his first book, Physical and Emotional Aspects of Marriage was never republished.

School Health Practice, in its fifth edition in 1972, was first published in 1956. It covers health instruction in elementary schools,

junior and senior high schools, and school health services. It ranked first nationally in its field in adoption and sales in 1972 ("O.S. U. prof book tops . . .", 1972).

In 1973 Community Health was in its second edition. This book has been adopted by more than 100 colleges and universities in the United States and Canada, including schools of medicine, public health, nursing, social work, and science ("One hundred colleges . . .", 1973). The text is also accompanied by a test manual of 1,500 questions.

Dr. Anderson's books have sold more than a quarter million copies in the United States, Canada, Europe and Asia (Anderson, 1974).

Where did Dr. Anderson acquire his knowledge and information? He was a scholar and he enjoyed reading. The background information for his books and articles can largely be attributed to his intense interest in reading scientific journals and books, and other publications related to health. His participation in voluntary and official health organizations, his attendance and participation at professional conferences combined with his experiences in health education and public health, contributed to his first-hand knowledge and background. He also had a remarkable memory for details, names and dates. Dr. Anderson spent a minimum of two years in the writing of each book following months of organizing and surveying

materials. His daughter, Janis Johnson (1974) remarked "Father had a unique ability to tune out every distraction from the family at home when he worked on his books." Dr. Anderson (1973) described his philosophy for accomplishment as (1) "being able to project yourself toward what needs to be done; (2) setting a time schedule for it; and (3) attempting to stay ahead of schedule." This philosophy was illustrated by David Spilver (1973), an editorial director of the C. V. Mosby Publishing Company, who said:

I have found Dr. Anderson to be one of the most disciplined and reliable authors with whom I work. It was always a pleasure to know that his material would be on my desk without fail on the manuscript due date . . . in several instances he bettered the due date by some months.

Many people know Dr. Anderson through his writings. His textbooks have earned him recognition by such health educators as Delbert Oberteuffer of Ohio State University, Warren H. Southworth of the University of Wisconsin, Oliver E. Byrd of Stanford University, and N. P. Neilsen of the University of Utah.

Dr. Hasuwo Mukai (1973), Associate Professor of Health Education at Ehime University in Matsuyama, Japan, described the impact of Dr. Anderson's School Health Practice upon him:

I have come to know you through your eminent book, School Health Practice. Ever since I first saw the book, I have been using it for about 20 years. I find the fourth edition, which I am using now, the most comprehensive work in the field that I have ever known . . . .

### General Hygiene by Television

From its beginning in 1910, General Hygiene continued to be a requisite course for graduation at Oregon State University. Dr. Anderson at all times sought innovations and efficient, economic procedures for teaching General Hygiene. When he was invited by the Oregon State System of Higher Education to participate in an experimental program of teaching by television, he eagerly accepted.

From the early 1950's members of the Oregon State System of Higher Education had been interested in the potential of television for educational purposes. Oregon anticipated a period of rapidly growing enrollments and a shortage of qualified faculty. By 1957 plans were formulated to link colleges and universities in Oregon through televised instruction on an experimental basis for seven years.

An educational television station, KOAC-TV-Channel 7, was constructed near Corvallis in 1957 so that its broadcast range would reach Oregon College of Education, Monmouth; the University of Oregon in Eugene; and Oregon State College. Five schools, 29 courses, 18 professors, and 16 subject matter fields were involved in the experiment from 1957 through 1964 (Starlin and Lallas, 1964).

Oregon State College courses taught by television for the project included: General Chemistry, Educational Psychology: Learning; General Chemistry; Appreciation of Literature; General

Hygiene; General Biology; Meteorology; and General Psychology.

In the fall of 1959, Dr. Anderson's General Hygiene classes were televised live from the classroom. During the winter and spring terms of 1960 the programs were kinescoped, and by 1961, he had developed 19 television videotapes on the subject of general hygiene. These tapes correlated with the textbook, Health Principles and Practice (Shaw, 1965).

Dr. Anderson taught General Hygiene via television in the interinstitutional experimental program to approximately 200 students at the University of Oregon, 550 students at Oregon College of Education, and 5,800 students at Oregon State from 1959 through 1964. The open circuit television also allowed citizens at home to view the programs and take the course for credit through the Oregon State General Extension Division. The University of Oregon discontinued using the General Hygiene television lectures in 1962 because they preferred to have courses taught by their own staff. The tapes were continued, however, at Oregon College of Education through 1970 (Livingston, 1973).

Dr. Anderson learned from his television taping and re-taping experiences that the tempo of television was different from that of the traditional class. To tape a single lesson sometimes took five hours or more. His own sense of perfection required that he spend additional time to update tapes and improve the subject matter as



the project progressed (Anderson, 1962).

The television project to Dr. Anderson was an exciting challenge, something he had known little about before the beginning of the project. Dr. Harold M. Livingston (1973a), Professor of Speech Communications, who directed the project said "Dr. Anderson entered the project with energy and enthusiasm and planned each lesson carefully, outlining the lectures and visuals so coherently that the production staff had little difficulty filming."

By 1964 attitudes toward instruction by television varied from strong approval to strong opposition by students. There was much less student-instructor contact through the medium of television. Students were on their own, a discipline many young college students found difficult. The university faculty attitude toward the use of television as a teaching media was either neutral or one of great concern regarding possible negative effects of television instruction upon quality. The professors who taught other subjects in the project said unanimously that they prepared and taught as well as, or better than, they had done as teachers in the conventional classroom (Starlin and Lallas, 1964a).

The research of Dr. Donald Shaw (1965a) showed that no significant difference existed between the conventional General Hygiene classes (those taught by members of the Health staff) and the closed circuit television classes. Further evidence indicated

that students of low mental ability found a greater knowledge increase in the conventional classes.

The seven-year interinstitutional television project ended in 1964 but the General Hygiene course was continued until 1970. From 18,000 to 20,000 students fulfilled their General Hygiene requirement from 1959 to 1970 via television. The tapes became outdated, however, in the late 1960's. Because of the nearness of Dr. Anderson's retirement, he chose not to expend the necessary time and effort to revise them.

#### Faculty Senate

The Oregon State University Faculty Handbook (1970d) describes the Faculty Senate as:

. . . a legislative body that is responsible for academic policies, educational standards, curricula, and academic regulations. It studies and prepares recommendations to the President of the University concerning the welfare of the faculty and it is a means through which matters of general interest to the faculty or institution may receive appropriate action . . . . Members of the senate are composed of elected members from the schools and divisions. . . .

Another academic interest of Dr. Carl Anderson's was the Faculty Senate. Although when he arrived in 1949, Dr. Anderson wished to be a good teacher and a strong administrator, he realized that he must provide service by helping in the governing affairs of the university. In 1952, he was selected by members of the Division

of Physical Education to represent the Division on the Faculty Senate, and he represented them intermittently for the next 15 years.

In 1952, the Faculty Senate was called the Faculty Council, and President August L. Strand presided at its meetings. The vice-chairman was elected by members of the Council and presided in the absence of the President.

Dr. David Nicodemus (1973), Dean of Faculty at Oregon State University, said: "the vice-chairman of the Faculty Senate is considered to be the highest faculty position at the university as far as university government is concerned."

Dr. Anderson was elected vice-chairman for the 1957-58 academic year. During his year as vice-chairman, the name was changed from Faculty Council to Faculty Senate.

Improved faculty salary schedules; faculty honors awards; a School of Science Honors Program; and Interinstitutional Television Teaching project were among significant topics considered during Dr. Anderson's first term as vice-chairman (Faculty Senate Minutes, 1957).

In 1961-62, Dr. Anderson again served as vice-chairman, a "unique occurrence for a member of the Senate" (Nicodemus, 1973). A Reserve Officers Training Corps change from a compulsory to a voluntary program; the new library; and the replacement of final examinations with a week of classes for seniors were major subjects

of discussion that second term (Faculty Senate Minutes, 1961).

### Committee for the Advancement of Teaching

A successful teacher himself, Dr. Anderson persistently sought to stimulate other teachers and increase their professional efficiency.

The Committee for the Advancement of Teaching was created by the Faculty Senate at the request of the Student Senate. For ten years (1952-1962) Dr. Anderson was chairman of this committee. The development of two appraisal of teaching and learning forms, the promotion of an outstanding teaching award, and the organization of campus and state conferences on college teaching were among the important contributions of this committee.

### Teaching and Learning Appraisal

The teaching appraisal program was the result of student initiative. The senior men's service honorary, the Blue Key, in 1948 proposed that a plan for rating teaching by students be instituted. The Faculty Council (Faculty Senate) approved the proposal and implemented it through the faculty-student Teaching Appraisal Committee (later designated as the Committee for the Advancement of Teaching) which proposed that (1) the rating be done at the request of the faculty member, (2) a standard form be used with provision for

flexibility, and (3) results of the rating be the sole property of the individual faculty member (Goode, 1974).

From other colleges and universities teaching appraisal forms were gathered and compared, and in 1959, an appraisal form was prepared by the committee for use at Oregon State.

Five years after the Teaching Appraisal Form was constructed the committee developed the Learning Appraisal Form. The objectives were to supplement the Teaching Appraisal Form, and to direct students' attention to their own progress as learners. Through this medium both teacher and student were reminded that learning is the important thing and that the teacher's effectiveness is measured by learning.

Although the forms were used primarily by Oregon State University, other colleges and universities adopted them too. Eight thousand forms were used in one year by the University of Wisconsin. For several years about 15,000 were distributed annually by faculty members at Oregon State University, but their use has declined in recent years.

#### Outstanding Teacher Award

Dr. Nicodemus (1973a) stated that: "through the Advancement of Teaching Committee Dr. Anderson developed a recognition program for identifying faculty, based on student evaluation for outstanding

teaching."

Dr. Anderson, remembering the stimulation he had received at Utah State College when he was named Outstanding Professor, suggested similar awards would motivate faculty members at Oregon State. The program was financially supported by the Oregon State University Alumni Association which had been instrumental in first proposing the outstanding teaching award. In 1959 he received permission from the Senate to form an Outstanding Teaching Award Committee. After nine years, however, the program was discontinued.

#### Conferences on College Teaching

During Professor Anderson's chairmanship of the Committee for the Advancement of Teaching, four campus and six state-wide conferences on college teaching were proposed and promoted by the committee. Panel discussions, symposia and round-table discussions, and other student/faculty participation took place at each conference. A special theme was designated for each meeting and distinguished educators were invited to be keynote speakers. Theme titles included "Superior Teaching" (1960), "Experiments in College Teaching" (1961), and "Procedures for Teaching" (1962).

### Additional Committees

During his two years as vice-chairman of the Faculty Senate, Dr. Anderson was responsible for the Faculty Day programs. The Faculty Day committee, composed of ten faculty members, prepared, supervised, and presented the program of orientation for Faculty Day held one week prior to the beginning of each new school year.

The events of World War II and the Korean War aroused Dr. Anderson's interest in nuclear weapons, and he followed the development with respect and apprehension. He shared concern with others about the possibility of radiation hazards on the campus, in the laboratories, and around the community. He served on the Radiation Safety committee from 1952 to 1955. The function of this committee was to check the adequacy of safety precautions surrounding all work with radioisotopes and ionizing radiations for the protection of the health of the staff, students, and the community.

### School of Science Honors Program

Having been an honor student himself at the University of Michigan, Dr. Anderson continued his interest in programs that developed the academic potential of students. In the fall of 1959, he was asked by Dr. F. A. Gilfillan, Dean of the School of Science,

to direct the new School of Science Honors Program. Dr. J. D. Lattin (1973), Professor of Entomology in the School of Science, described the program as:

. . . an operation designed to enrich and extend academic opportunities for the superior student. The program provided a means by which the most able students realized their full potential in the development by providing an environment conducive to analytical and creative thinking.

Honors students were chosen for inclusion in the Honors Program because of their superior high school scholastic records. In some courses on the campus, Honors sections conducted at an advanced level were set aside for students in the program. It was believed that gifted and alert students, grouped together in a classroom, promoted an atmosphere which stimulated enterprise, learning, and accomplishment (Lattin, 1973a).

Freshman and sophomores participated in a colloquium each term which consisted of weekly forums attended by from 6 to 12 students and one or more faculty members. Each group explored interest areas and participated in discussions. On occasion, all colloquia students were addressed by distinguished speakers.

At the junior and senior level, the Honors students participated in the Honors Program of the department in his major field of study. All Honors Programs included courses in philosophy of science, Honors readings, special projects, special course work, seminars, thesis, comprehensive written examinations, and oral examinations



conducted by the department. A student received 9 to 18 credits for special work done in the Honors Program during the junior and senior year.

From 1959 to 1963, Dr. Anderson conducted the School of Science Honors Program in a special Honors Center in the Physics-Chemistry building. About 150 sophomores, juniors, and seniors participated in the program under his direction. He was responsible for soliciting the voluntary services of about 20 faculty members to serve as proctors for the colloquia and the discussions. Dr. Anderson expressed his pleasure at being able to help superior students combine their talents with the will to use their intelligence (Anderson, 1973).

It is the writer's belief that Dr. Anderson's participation in the Honors Program contributed to the development of the program as it expanded in 1964 to include the School of Humanities and Social Sciences, and in 1966 to become an all-university program.

#### The College Student Course

Dr. Anderson's well-known interest in students caused him to be asked to teach The College Student, a course which he then taught from 1964 to 1970.

Established in 1951 under the direction of Mr. Delmer Goode in the School of Education, The College Student course included a

look at some of the hereditary, physical, and cultural factors which contributed to the maturation of the student (Boice, 1972).

Dr. Henry Hansen (1973), Dean Emeritus of the Graduate School, described Dr. Anderson's teaching of The College Student course this way "Dr. Anderson did a good job of teaching The College Student . . . ."

Dr. Horton L. Fross (1973), student advisor in the College of Liberal Arts at Oregon State University and a former student of Dr. Anderson, remarked "He is a master teacher . . . his classroom techniques were adapted to the student. By questions, he could draw out a student and make him feel important." Greatly impressed with Dr. Anderson's teaching of the course, Dr. Fross later understudied him and began to teach The College Student when the latter retired.

Mr. Goode (1973) who worked closely with Dr. Anderson in the College and University Teaching Program, said: "Dr. Anderson organized faculty and student panel discussions of 'the college student' as a feature many years of the Graduate School Workshop in College and University Teaching." The workshops were conducted during summer terms at the university.

### Sports

Dr. Anderson would not be considered the athletic type of

person. He is five feet, eight inches tall; has maintained his weight at around 165 pounds, and is broad-shouldered. His brown hair has greyed at the temples in recent years. His interest in football, baseball, and skiing caused him to be called upon by the director of athletics at the university to participate at track meets as a judge or timer. He enjoyed helping athletes perform to their greatest potential and followed their records of achievement while they participated for the university and after they left school. He continues to communicate with Dale Nelson, the track athlete from Utah State University whom he helped overcome his hypertension.

Dr. Anderson was willing to help athletes with their scheduling problems. Robert Covey (1973), former doctoral advisee and athlete at Oregon State University stated:

Dr. Anderson helped me and the track program at Oregon State University . . . he supported my candidacy for the assistantship in health education by recommending me as an assistant to Sam Bell, the track coach. . . . I was granted the financial assistance in health education with the provision from Dr. Anderson that I work with Coach Bell after my health education responsibilities were finished. . . .

Dr. Anderson could relate to his colleagues in the Athletic Department and the Division of Health and Physical Education because he could converse with them about the records of athletic teams or the records of professional athletes. Dr. Robert W. Bergstrom (1973), a colleague in the Division of Health and Physical Education illustrated this by saying:

I recall his estimate of baseball pitchers such as Grover Cleveland Alexander, Hall Newhauser and others. He also admired Harry Heilman as a fine hitter. He had observed the Detroit Tigers Club for some time while in Michigan. . . .

Dr. Anderson's interest in athletes prompted him to conduct research on their physical performances.

The Neuromuscular Chronometer  
The Displacement Tank

Professor Anderson taught physiology classes in which many athletes and physical education majors enrolled. Part of their training involved the study of human muscular responses. In 1954 he built the Neuromuscular Chronometer, an instrument capable of measuring 16 muscular reactions to various stimuli.

Dr. William McArthur (1957, p. 5), who used the Chronometer in his doctoral research at Oregon State University, described the function of the instrument as follows:

The Chronometer could measure time required for the flexion and extension of the hands and arms, flexion and lateral movement of the leg extension of the lower leg and foot. Simple reaction without choice as well as those requiring a choice of response could be calibrated. Circuits were designed so that only the correct response would result in a recording.

Bernice Peterman (1958, p. 9), who used the Chronometer in a research project for her master's thesis, described the procedure for administering the test as follows:



Figure 3. The Neuromuscular Chronometer

Each subject used a green light and a bell for the right hand or foot and a red light and a buzzer for the left hand or foot. The time interval given between stimuli was varied between one and four counts. After the initial explanation, the subject was told to concentrate on the stimuli and turn off the stimulus by striking the appropriate key every time it came on.

The Anderson Chronometer aided students in Dr. Anderson's classes and provided research material for four master's and two doctoral theses at Oregon State University.

Results of experiments in his classes again inspired Dr. Anderson this time to construct an instrument that would measure the body weight of individuals. In 1956 he developed the Displacement Tank, a vessel large enough to contain a human body. The seven-foot high metal tank filled with water, served to measure the actual body weight and specific gravity of an individual after he exhaled and submerged, by determining the amount of water the body displaced. Although he used the Displacement Tank for experimental purposes in future classes, its value was limited, and has not yet been used in graduate research.

### Family

When he was not involved with his campus responsibilities, Dr. Anderson was usually at home writing books or enjoying his family. Beside reading, a source of pleasure he acquired as a child in Ironwood, he was interested in art, music, and literature,

and he shared this interest with his children, taking them to plays, concerts, lectures and art exhibits whenever possible.

Dr. Anderson's affection for skiing never diminished and he encouraged his children to learn the sport. Janis and Nancy share their father's love for skiing, and both girls became proficient skiers. Often their father would drive the girls and their friends to the mountains for weekend ski trips. Nancy Anderson Sahlin (1973) related this story about her father:

When I was attending Oregon State College in the fifties, father and I had gone to Santiam Pass to ski. He wore a pin-striped suit, vest, tie, gloves and carried no poles. He walked up the slope carrying his old jumping skis with their leather thong bindings. He looked like a professor going to class rather than a skier. Other skiers, many of them Oregon State students, dressed in appropriate ski clothing, grinned as they watched him plod up the hill. However, their grins turned to looks of amazement when he skied down the hill. Afterwards, he slyly commented: 'Well, Nancy, I guess we showed them a thing or two.'

Nancy, the eldest of the Anderson children, was a freshman in college when the family arrived in Corvallis. She attended Oregon State University one year, majoring in fine arts, transferred to the Michigan State University where she completed her baccalaureate degree in 1953 with a major in communications. She married Douglas Sahlin in 1956. The Sahlins have two children, a boy, Erik Carl, born in 1958, and a girl, Christine Janis, born in 1960.

Janis was in the sixth grade when the Andersons arrived in Oregon. After completing her compulsory schooling, she enrolled

at Oregon State University majoring in pre-medicine. Her education was interrupted, however, when she married her college fiancé, recently-commissioned Bob Johnson of the United States Air Force in 1958. The young couple left almost immediately for a three-year tour of duty in Banbury, England. They returned to live in Seattle, Washington, in 1961, where Janis attended the University of Washington, completing her baccalaureate degree with a major in chemistry. The Johnsons have three boys, Karl Frederick, born in 1964, Andrew Martin, in 1966, and Matthew Robert, in 1970.

Hayes, the youngest Anderson, attended elementary school from the fourth grade in Corvallis, and continued his education through college at Oregon State. He majored in speech but, becoming interested in communications, continued his education at Michigan State University in the field of communications. He earned a master's degree and his doctorate and he ultimately became an Associate Professor of Communications at San Diego State University. Hayes married Marilyn Nelson in 1960 and they had two children, a boy Kenneth Scott, born in 1964, and a daughter, Laura Lynn, in 1966.

The Anderson children respected their father for his strength and loved him for his kindness. Although they admired him for his scholarship, they were grateful that he encouraged them to pursue their own interests. He wanted them to enjoy learning and was satisfied as long as they tried. Hayes Anderson (1973) remarked: "He



never held up his achievements to us. "

Dr. Anderson set the stage for his children's early learning by providing a conducive study atmosphere. Immediately following the evening meal at the Anderson home, all sat down to study. He helped the youngsters only when they asked for his assistance, and provided them with encouragement whenever they needed it.

#### Sabbatical Leave

By 1960 life for the Andersons was quieter. Hayes was attending graduate school in East Lansing, Nancy was living in California, and Janis was living in England. Having never traveled to Europe Dr. Anderson applied for his first sabbatical leave from the university. He asked his colleague, Dr. Roy Foster, to administer his General Hygiene television classes in his absence. The Andersons intended to combine business with pleasure during the leave. They planned to tour Europe five months to investigate health centers, colleges and universities, and to visit their daughter and son-in-law.

Dr. Anderson prepared an itinerary that would take him to universities, research centers, and health agencies in 16 countries. His goals were to (1) observe and review courses of study in educational methods and learn about educational problems in Europe, (2) examine health education programs, (3) study gerontology

research programs, (4) review public health programs, (5) study national medical care programs, (6) establish professional contacts, and (7) visit cultural centers (Anderson, 1961).

He visited universities and health centers in England, Scotland, Ireland, Norway, Sweden, Denmark, Belgium, Germany, Austria, Switzerland, Italy and France. He noted that, as in the United States, increasing enrollments in European universities created staffing difficulties, and inadequate student housing and classroom facilities. He observed that health instruction in the universities was usually a responsibility of the science faculty or the faculty of medicine. Only a small percentage of secondary schools in Europe offered health instruction he found. Despite the advantages of national medical programs in some countries, school children in Europe did not appear to have as high a level of health as the children in American schools (Anderson, 1961a).

Among the highlights of Dr. Anderson's European trip were visits to inspect ten gerontology laboratories in England, France, Sweden, Scotland, Denmark, and Switzerland. He had become acquainted with about 12 European professors at a Gerontological Society convention in Los Angeles, California, the year before his trip, and they encouraged him to visit them when he came to Europe. He knew that European scientists had been studying gerontology long before their American counterparts, so he had looked forward with

anticipation to visiting them and learning more about the aging. He observed that gerontology center staff members did not distinguish between normal and pathological aging. "Once this distinction can be made, a breakthrough will emerge in man's understanding of aging which doubtless will enable him to extend the prime of life by two or three decades" (Anderson, 1961b, p. 14).

He discovered in Europe that many public health programs were associated with national medical care. "Sweden's medical care insurance system is generally regarded by experts in the field as the outstanding national socialized medical program" (Anderson, 1961c, p. 11). The Swedish system of medical care coordinates medical care insurance, sickness benefit insurance, and employment injury insurance but the government is the insuring agency and the program is compulsory for all Swedes over 15 years old.

The British generally were pleased with their medical care program, but the quality of medical care and hospital services were considered by Dr. Anderson far below that which Americans would regard as optimum.

When he visited the World Health Organization in Geneva, Switzerland, he found that many staff members were on duty promoting health in the Mediterranean area, in African countries, and in Asia. They worked in teams to combat the diseases and unsanitary conditions associated with lack of health facilities.

Before leaving Geneva, Dr. Anderson was impressed by a visit to the library of the International Labour Office. He also spent some time talking to personnel in the International Social Security Administration office.

The Andersons returned to the United States in January, 1961. For Dr. Anderson, expanded knowledge of health in Europe was a major source of information for his planned textbook in community health, and for the revision of his other books.

### Conclusion

From Dr. Anderson's arrival in 1949 until his retirement, he revealed himself to be a highly-motivated, energetic individual pursuing the development of the Department of Health at Oregon State University. He taught and advised many students, participated on campus committees, and became involved with other academic interests. His writing of textbooks, developing of research instruments, and continuous search for new information and understanding were all parts of his way of life.

Another important part of his life while living in Oregon was his service to official, voluntary, and professional health organizations; the Oregon State Department of Education; the Oregon Heart Association; the Northwest District of the American Association for Health, Physical Education, and Recreation; the American Public

Health Association; and many others. These services were among his most significant contributions to public health and health education.

## V. VOLUNTARY, OFFICIAL AND PROFESSIONAL HEALTH ORGANIZATIONS

Prior to concluding the various aspects of Dr. Carl L. Anderson's professional career, it is significant to refer to selected health organizations which he served. During his years in Oregon, he served numerous voluntary, official, and professional health organizations on a state, regional, national and international level.

The voluntary organizations in which he was most active were the Oregon Heart Association, the Oregon Tuberculosis and Health Association (now the Oregon Lung Association), and the American Cancer Society, Oregon Division. He worked with such official health organizations as the Oregon State Board of Health (now the Department of Human Resources, Health Division); the Oregon State Department of Education; the United States Office of Education; the United States Department of Health, Education, and Welfare; and the World Health Organization. He served such professional organizations as the Oregon Association for Health, Physical Education, and Recreation; the Oregon Academy of Health Educators; the Northwest District of the American Association for Health, Physical Education, and Recreation; the Western Branch of the American Public Health Association; the American Public Health Association; and the American Medical Association.

His scientific interests prompted him to join such organizations as the American Association for the Advancement of Science, The American Society of Human Genetics, and the Society for Research in Child Development, and the Gerontological Society.

His energetic participation gained him professional recognition and invitations to speak at numerous meetings and conferences of many of these health organizations. Despite his active life, he continued to write for scientific and professional journals.

### Voluntary Organizations

#### Oregon Heart Association

One way that people have been serving their own best interests has been through voluntary service. Many health agencies could not act effectively without the services of volunteers who donate their services on committees (American Heart Association, 1961). Dr. Anderson gave freely of his time to committee work with voluntary health agencies. Few committees were more productive than the Oregon Heart Association's School Health Committee on which he served as chairman for many years.

Since its founding in 1924, the American Heart Association, through its professional staff, physicians, and volunteers, served the health needs of the American public. Among the millions believed to have some form of circulatory disorder, approximately

one-half million children of elementary and high school age are victims (American Heart Association, 1961a). With these statistics in mind, Dr. Anderson contacted Howard J. Stroud, the Executive Director of the Oregon Heart Association in Portland, to discuss how he might assist the association. Together they organized the School Health Committee in 1962 which accomplished many projects through the years:

- a workshop on school health at Portland State University in 1963;
- A poster contest among school children of the Portland metropolitan area;
- teacher conferences on the cardiovascular health of the school age child;
- teaching units on the cardiovascular health in junior and senior high schools;
- a teaching unit on smoking and health for the third grade level;
- a senior high school nutrition unit called "Protective Food Habits for Teens";
- the phonocardiocanning of approximately 10,000 fourth grade students throughout Oregon, in an effort to identify cardiovascular disorders;
- a comparison of electrocardiogram patterns of wrestlers and basketball players with those nonathletes during rest and severe exercise at a Portland high school; and
- a blood lipoprotein study of approximately 150 seventh grade boys and girls in Corvallis junior high schools.

Dr. Anderson demonstrated an ability to organize committees and stimulate volunteers. Betty Polen (1972), a health specialist in Portland who served on the School Health Committee with Dr. Anderson said:



Dr. Anderson had the ability to motivate others to work toward solutions to health problems. . . . Although members of the committee serve only in a voluntary capacity, more projects have been completed by this group under his leadership than any other committee on which I served. He gets the necessary funding for projects and then includes members of the committee in the projects by assigning them tasks and seeing to it that they complete them.

Mr. Howard Stroud (1972) added: "Carl can manage a committee and produce for the Association."

Dr. Anderson's contributions to the Oregon Heart Association were recognized in 1969, when he was awarded an Outstanding Volunteer Leadership certificate and medal at the Honor Awards Presentation Program in Portland, Oregon.

Oregon Lung Association, American  
Cancer Society, Oregon Division

The National Lung Association was founded in 1904. The American Cancer Society was formed in 1913. Both organizations operate primarily on the community level with state associations as supervisors over the local units. Both organizations promote the idea that effective campaigns to combat lung conditions or cancer must be accomplished by educating the public at the local level.

In 1961 each organization struggled to form a program that would include all health agencies in Oregon in an effort to combat dangerous lung conditions associated with smoking. At that time

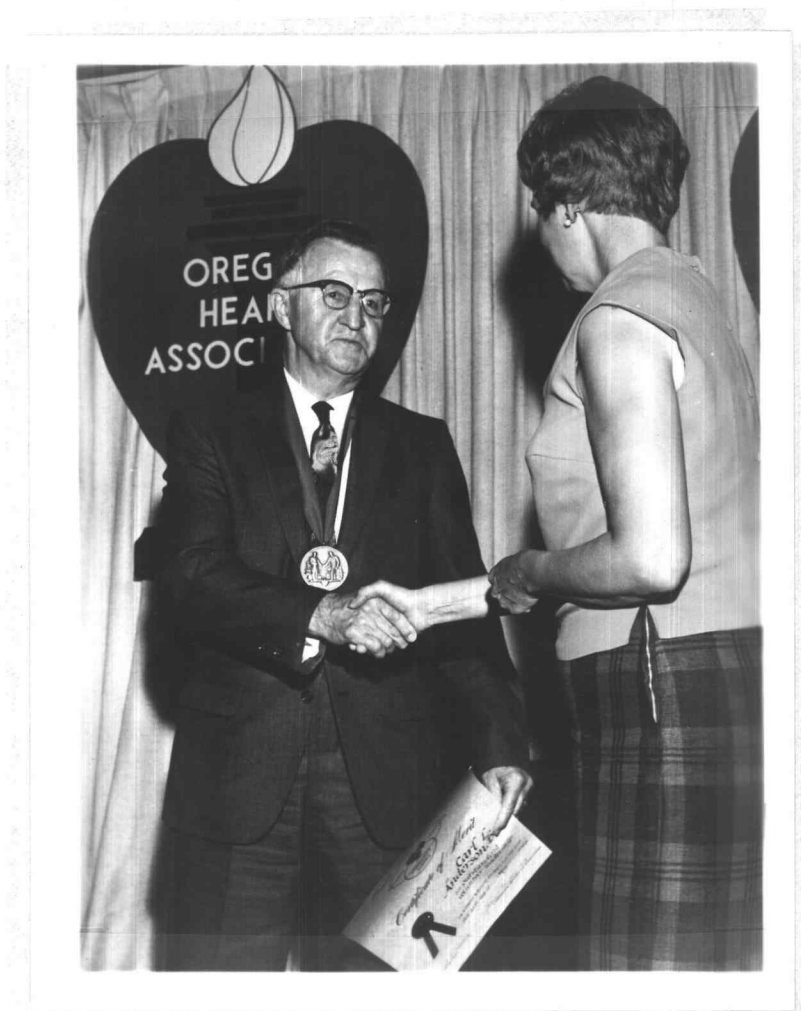


Figure 4. Oregon Heart Association, Outstanding Volunteer Leadership Award, 1969

the Surgeon General's committee on smoking and health in the United States was conducting an extensive investigation into the relationship of smoking and lung ailments. An Oregon Interagency Committee on Smoking and Health was eventually organized on March 5, 1962.

After it struggled to succeed for six months, the Committee asked Dr. Anderson to become its chairman. As Wade Patterson (1973), Public Health Educator of the Oregon Lung Association, said:

"Dr. Anderson gave the committee the boost it needed to get something going . . . ."

At a meeting on October 9, 1962, Dr. Anderson made two proposals: (1) that two institutes on smoking and health be conducted, one in Portland and one in Corvallis in the spring of 1963; and (2) that a two-week workshop be conducted to inform the public of the effects of smoking on their health, to compile factual material on the subject, and to form a teaching unit (Patterson, 1973a).

Realizing that the effectiveness of each agency's program could be augmented by interagency cooperation, the Oregon Interagency Committee on Smoking and Health presented two-day institutes on April 11, 1963, at Oregon State University, and on April 12, 1963, at Portland State College. Sponsoring agencies included the American Cancer Society, Oregon Division; the Oregon Association for Health, Physical Education, and Recreation; the Oregon State Board of Health; the Oregon State Department of Education; the Oregon Heart

Association; Oregon Medical Societies; the Oregon Thoracic Society; the Oregon Tuberculosis and Health Association; the Portland Public Schools; Oregon State University; and Portland State College. Distinguished leaders in medicine and science were joined by prominent educators in discussing statistical research on cancer, cardiovascular diseases, diseases of the chest, and behavioral aspects of smokers. The institutes were attended by approximately 600 people.

The two-week workshop on smoking and health was conducted at Portland State in June, 1963, under the direction of Dr. Gordon Anderson from the Department of Hygiene and Environmental Sanitation at Oregon State University.

Dr. Carl Anderson was a strong proponent of the Oregon Inter-agency Committee on Smoking and Health, and he involved other members of his staff, Dr. Gordon Anderson and Dr. Arthur Koski, in his responsibilities. These men conducted approximately 29 workshops on smoking throughout the state of Oregon for educators, clergy, nurses, and others interested in the problem of smoking and health. Of the 29 workshops, all but seven were conducted at Portland State College and Oregon State University.

Golda L. Falloon (1973), former Executive Director of the American Cancer Society, Oregon Division, summarized Dr. Anderson's service to voluntary health organizations this way:

Dr. Anderson gave agencies an opportunity to blossom and bloom because he invited their participation giving them opportunity to sell their programs. This was a tremendous boost to struggling agencies in need of a better understanding by the public as a whole. He was a master of his trade; he always had something to contribute, leaving members with new thoughts and new ideas. . . .

### Official Organizations

#### Oregon State Department of Human Resources Health Division

The Oregon State Department of Human Resources includes eight divisions, bringing together all of the state's social services and making it the largest agency in the state government. One of the divisions, the Health Division, is responsible for the administration of health and health-related fields. Its functions are supportive to county and regional health departments (Bell and Koellmann, 1973). Dr. Anderson cooperated with the activities of the Health Division as a participant and a consultant.

In 1966 he was invited by Oregon Governor Tom McCall to participate as one of 12 members on the Governor's Committee on Aging, a position he held for six years. The state program received, administered, and managed federal funds for local and regional service programs for the elderly in Oregon.

Dr. Anderson's interest in aging led him to work with this central planning committee coordinating and evaluating programs.

The committee convened regularly to discuss the problems of the older people in the state. A member of the committee was selected to survey the communities and ascertain the needs of the senior citizens. This field representative, a retired professor from the University of Oregon, reported to the committee what he thought the needs were so the committee could take appropriate action. An example of such a need fulfilled by the committee was the purchase of an economy bus for use of Hood River, Oregon, senior citizens who otherwise had little or no transportation.

In 1967 Dr. Anderson was invited to represent Oregon State University at a Health Coordination Conference sponsored by the Health Division. The conference was planned to coordinate programs in health-related fields between educational institutions and the health professions.

#### Oregon State Department of Education

For many years Dr. Anderson felt that health education should be an integral part of the school curriculum and that in many sections of the state few, if any, health programs were available to children in public schools. For example, health education was not available when his younger daughter and son attended school in Corvallis.

Dr. Anderson further believed that Oregon's children should be able to accept the responsibility of caring for their own health and



*To Dr. Carl Anderson, a generous giver of time and talent, with thanks!  
Tom McCall*

Figure 5. Oregon State Department of Health, Governor's Committee on Aging, 1966

improving the health of the community as well. He also recognized the necessity of preparing for health teachers an effective curriculum guide to assist them in planning a sequential functional approach to the teaching of health in the public schools.

A Handbook for Health Instruction in Oregon Elementary Schools was the only guide to the state's schools during the 1950's and early 1960's, but was determined inadequate. The State Department of Education, therefore, planned to develop a health learning program for all levels of the public school system. An Elementary Health Education Handbook Committee and a Secondary Health Education Handbook Committee were appointed. Dr. Gordon Anderson and Dr. Roy Foster served on the secondary committee and Dr. Carl Anderson served on the elementary committee until their projects were completed in June, 1965.

In 1963, Dr. Anderson became a member of the Joint Staff Health Committee. He and Dr. Arthur Esslinger from the University of Oregon represented institutions of higher education in Oregon. Other representatives on the committee were selected from the Oregon State Department of Education, the Oregon State Board of Health, and the State Medical Society. Their primary service was to recommend programs and goals in health services for school age children (kindergarten through grade 12). Dr. Anderson served on this committee for seven years.



Betty J. Albin (1973), a colleague who worked with the State Department of Education in the mid-fifties and early sixties, served on several committees with Dr. Anderson. She explained his approach to committee work by quoting one of his expressions: "Do you know what a meeting is" It's a place where you keep minutes and waste hours ---so let's get to work."

Dr. Anderson often served on committees where his work was valued because of his ability to motivate others to work toward solutions. Max W. Braden (1972), a health educator for the Health Division, commented about Dr. Anderson's thoroughness this way: "He leaves no stones unturned in his effort to be thorough and accurate . . . whatever the task, one always feels it has been completed in the most satisfactory manner possible when Carl is involved."

United States Office of Education, United States  
Department of Health, Education, and Welfare

In 1953, Dr. Anderson was appointed by the United States Office of Education to serve on a national committee. He was one of seven health educators in the United States selected to explore national training needs in health education to improve health education standards. He served on this committee for three years and attended annual meetings of the committee to review the standards

("Dr. Anderson named . . .", 1953).

His interest in professional standards and his experience with various associations in the development of health education standards was recognized by other organizations. The United States Department of Health, Education, and Welfare asked him to be vice-chairman of the 1955 Conference on Undergraduate Health in Washington, D. C. The conference attracted health educators from 53 colleges and universities, and health organizations workers from 13 national health organizations. The purpose of the conference was to develop standards and further the profession of health education in colleges and universities ("O.S.C. man heads . . .", 1955). He was named chairman for the 1957 conference on undergraduate health.

#### World Health Organization

After Dr. Anderson arrived at Oregon State he wrote articles that appeared in many periodicals: the Journal of School Health, the Journal of Nervous and Mental Disorders, the Quarterly Review of Psychiatry and Neurology, the Elementary School Journal, the American Journal of Public Health, and Improving College and University Teaching. In 1964, one of his articles, entitled "Preparing School Health Educators: Much More Than a Planned Curriculum," appeared in a symposium report, Professional Preparation in Health and Health Education, published by the World Health

Organization.

Dr. Anderson's article for the World Health Organization was based on materials he originally presented at the 1962 International Professional Conference Preparation on Health and Health Education in Philadelphia.

#### International Congress on Smoking and Health

Dr. Anderson's work with Oregon's Interagency Committee on Smoking and Health was recognized and appreciated by W. A. Scharffenberg, Executive Secretary to the International Congress on Smoking and Health. He invited Dr. Anderson to be a member of the board of the First International Congress on Smoking and Health in New York City in 1965. The Congress included noted scientists, physicians, and educators, among them, Dr. Linus Pauling, Nobel prize-winning chemist, a graduate of Oregon State University.

#### Professional Organizations

##### Oregon Association for Health, Physical Education, and Recreation

When in 1937, health was recognized as a field and added to the title of the American Physical Education Association, Dr. Anderson joined the group. Twelve years later he joined the Oregon

chapter of the American Association for Health, Physical Education, and Recreation, which at that time was the largest department in the National Education Association (Means, 1962f).

When Dr. Anderson attended his first convention of the Oregon Association for Health, Physical Education, and Recreation on December 9, 1949, he learned from a speech delivered by George J. Sirnio, the State Director of Health and Physical Education at that time, that the state's school health education program was handicapped by teachers inadequately trained in health. Sirnio pointed out that teacher education standards in health education should be re-examined in light of Oregon's immediate and future needs. As a result of this meeting, a Teacher Education Standards in Health Education Committee was selected and Dr. Anderson was appointed as chairman. This was one of the many projects he participated in for the Association. Through the years he chaired an honor awards committee, composed a professional code of ethics for the organization, devised the "Sparky" award for past presidents of the association, and served on several other committees.

When Dr. Anderson assumed chairmanship of the Teacher Education Standards Committee in 1949, he appointed policy and curriculum committees. The Policy Committee represented a cross-section of Oregon organizations: the State Department of Education, the State Medical Society, the State Department of Health,

the Oregon School of Medicine, colleges and universities, the Oregon Tuberculosis and Health Association, the American Cancer Society, the Mental Health Association, and public school administrators. The Curriculum Committee represented school superintendents, elementary and high school principals, elementary school classroom teachers, secondary school health educators, representatives from the Oregon Education Association, and professors of health education from colleges and universities.

Dr. H. F. Kilander, from the United States Office of Education, served as the chief consultant for the project. The Policy Committee undertook two tasks: (1) to determine the functions of health educators in the areas of health services, health education, and healthful school living; and (2) to detail competencies and learning experiences for health educators to perform their health functions properly (Report of Committee, 1953).

The Curriculum Committee developed four curricula: (1) secondary school health education major and minor, (2) health education requirements for all elementary school classroom teachers, (3) health education minor for elementary teachers, and (4) health education minor for elementary teachers who are to serve their school resource people in health (Report of Committee, 1953a).

Following the completion of work by the two committees, Dr. Anderson suggested integrating the viewpoints into a collective,

unified end product by conducting a workshop at Oregon State College on June 15-26, 1953.

The workshop was attended by 56 participants who developed the content of the areas proposed by the committees. The participants also passed a resolution urging the State Department of Education to incorporate school health as a requirement in the professional preparation of administrators (Anderson, 1954).

The project concluded at the annual convention of the Oregon Association for Health, Physical Education, and Recreation in November, 1953, when the membership adopted the complete report of the Teacher Education Standards in Health Education Committee.

As a result of his work on this project, Dr. Anderson wrote an article entitled "Oregon Teacher Education Standards in Health Education" published in the 1954 issue of the Journal of School Health.

Following his assignment with the teacher education standards committee, Dr. Anderson accepted the chairmanship of the Distinguished Program Awards Committee.

Dr. Anderson responded to this assignment by saying:

Educators have long honored individual members of their profession for distinguished service or accomplishments. An award for a program is somewhat unique but is decidedly logical in Oregon where we have a number of distinguished programs in health, physical education, and recreation ("Distinguished program awards . . .", 1957, p. 8).

The purpose of the Distinguished Program Awards Committee

was to determine standards for annual awards to school systems in health education, physical education, and to communities for distinguished programs in recreation. Steering committees were appointed, one for each of the three fields, and each committee developed an operating code setting standards for the procedures to be followed and methods to be employed in making final selections for the awards. A school system was required to have a 12-year program in order to qualify for an award in health education and physical education.

The committees developed evaluation forms based upon recognized standards and procedures in school health and in physical education. The forms were sent to school systems which were nominated by district presidents and other Association members as having outstanding programs. When the forms were returned, impartial committees of the Association studied the reports. Following these reviews, professionally qualified teams of Association members were dispatched to the highest rated schools to make evaluations. Final decisions were made following these team reports under the supervision of the steering committees. Final recommendations were made to the Association's Executive Council for its approval ("Distinguished Program awards. . .", 1957a).

The first Distinguished Program Awards in health were presented at the 1956 Oregon Association for Health, Physical Education,

and Recreation convention banquet to Lebanon public schools and the Eugene public schools. The physical education awards were presented to the Salem public schools and the Marshfield public schools. The awards were certificates mounted on mahogany plaques.

Dr. Anderson's belief that awards motivated professional pride caused him to propose that silver spark plugs be worn on blue ribbons by all past presidents of the Oregon Association for Health, Physical Education, and Recreation at the annual convention business meetings. If a past president appeared at these meetings without wearing his "Sparky", a small fine was imposed. The year was 1955. Dr. Roger Wiley of Washington State University was the first recipient of this award.

As a dedicated individual himself, Dr. Anderson believed that certain obligations, privileges and standards are inherent in the membership of any profession. He described these qualities in a written Professional Code of Ethics which defined a professional standards and principles guide for the membership of the Oregon Association for Health, Physical Education, and Recreation. He divided the code into five categories: (1) Relations of the member to the profession, (2) relations of the instructor to students, (3) relations of the instructor to his colleagues, (4) relations of the instructor to his institution, and (5) relations of instructor to the



public. The Professional Code of Ethics was adopted by the Association in 1958 and, for several years, reminded teachers of their ethical responsibilities.

Dr. Anderson served on the Constitution Revision Committee in 1955, the Resolutions Committee in 1958, and the Evaluation of Programs Committee in 1959.

His contributions to the Oregon Association for Health, Physical Education, and Recreation diminished in the late 1950's when that organization failed to fulfill the needs of professional staff members of voluntary and official health agencies, or school nurses. Although awarded the Honorary Life Membership Award in the Oregon Association for Health, Physical Education, and Recreation in 1965 for his contributions to the Association, he chose to express his disapproval by avoiding the meeting during which the award was to have been presented. He thereafter, dedicated himself to the promotion of a new organization called the Oregon Academy of Health Educators.

#### Oregon Academy of Health Educators

The Oregon Academy of Health Educators held its charter meeting October 13, 1967, at Portland Community College. The first officers of the organization nominated and elected at the meeting November 10, 1967, were:

President, Kenneth C. Ross, Oregon Lung Association;

Vice-president, Gordon W. Anderson, Professor of Health, Oregon State University;

Secretary, Josephine E. Ehn, Health Instructor, Franklin High School, Portland;

Treasurer, Gary M. Berg, Health Educator, Bend Junior High School, Bend, Oregon.

A constitution was approved and the Academy was launched with 72 members. Membership was extended, free of dues, to teachers of health, full-time school nurses, and professional staff members of voluntary and official health agencies. Associate memberships were extended to college students majoring in health and persons holding academic degrees with a major in health ("Purpose of the academy . . . ", 1968).

During the early meetings of the Academy of Health Educators, members agreed to promote the exchange of professional experiences and materials related to health, improve the quality of school and public health education in Oregon, enhance the public image of the profession, and encourage legislation of public support of health in the state.

Authorities in the health profession who were invited to speak at meetings included Dr. William H. Carolyn from the American Medical Association and Sidney I. Lazac, the Associate United States Attorney General.

Although it serves a legitimate need, the Academy currently is neither large nor functional.

Northwest District of the American Association  
for Health, Physical Education, and Recreation

Dr. Anderson joined the regional division of the American Association for Health, Physical Education, and Recreation. He attended their annual meetings regularly and served on several committees. One of the most noteworthy was a committee of teacher education standards in health education in 1953. He and Dr. Clair V. Langton, Director of the Division of Physical Education at Oregon State, had long been strong proponents of the improvement of the professional preparation programs within the Division at Oregon State.

Physical Education department heads from Oregon State College, the University of Oregon, Washington State College, and the University of Washington attending the Northwest District convention submitted a joint proposal. They suggested that a Northwest Council for Teacher Education Standards for Health, Physical Education, and Recreation be established within the organization. Through cooperative efforts of these institutions, the Council would attempt to improve the caliber of undergraduate teacher education programs in their respective schools. In 1953, Dr. Langton initiated the first meeting of the Council. At the

suggestion of Dr. Anderson, committees were formed in health, physical education, and recreation. The committees established minimum standards for teachers and made their standards known to administrators throughout the northwest. The standards developed by each committee were compiled into a single document to facilitate the evaluation process.

Departments were evaluated in the following areas: (1) general institutional standards, (2) school health education undergraduate curricula, (3) student personnel programs, (4) facilities and libraries, and (5) staff. The Council provided a method for evaluating each department, and a minimum rating was established for each area (Report of Northwest Council, 1964).

The member schools of the Council applied the evaluation system to their own programs before extending the evaluation to other institutions. The standards were completed and approved by the membership of the Northwest District of the American Association for Health, Physical Education, and Recreation in 1959.

After evaluating other institutions in the Northwest, the Council studied and re-directed some of the standards. The first revision of standards occurred in 1964 (Report of Northwest Council, 1964a). Dr. Anderson's health committee was given special recognition because it involved representative faculty members from each member institution when the teacher education standards in health

education were prepared.

The Northwest District of the American Association for Health, Physical Education, and Recreation recognized Dr. Anderson's work on the general hygiene television program at Oregon State. They invited him to address the research section of the 1962 annual convention on the subject. His address, "Televised Teaching in the General Hygiene Program", was delivered on April 26, 1962.

Dr. Anderson affiliated with the Northwest Scientific Association in 1955, and the Western Branch of the American Public Health Association in 1962. He continued to be active in the latter organization because of his longtime interest and affiliation with its parent organization, the American Public Health Association.

#### American Public Health Association

Dr. Anderson became a member of the American Public Health Association when he was a graduate student at the University of Michigan. He recognized the importance of this organization through his career in public health.

Organized in 1879, the American Public Health Association has a wide variety of activities carried on by 15 sections of the organization. The Association develops standards for the examination of water supplies, milk products, sewage disposal, swimming pools, and other public health services. It conducts surveys and studies;

and publishes pamphlets, special reports, and a monthly periodical called the Journal of Public Health. Dr. Anderson wrote several articles for the Journal and was invited to address the American Public Health Association convention in Kansas City in 1955 to discuss the teacher education standards in health education project he had previously completed with the Northwest District of the American Association for Health, Physical Education, and Recreation. The article was entitled "Professional Standards in Health Education." From 1958 to 1961, he served on the Governing Council of the American Public Health Association.

#### American Medical Association

Dr. Anderson's rapport with the medical profession began with the classes he took from Dr. Egbert Badgley and other physicians in the Medical School at the University of Michigan. He also closely associated with Dr. C. C. Slemons, Health Officer of the Michigan Department of Health, and other health officers in public health departments and voluntary health agencies. He frequently invited physicians as guest lecturers. Dr. Peter J. Batten, former Marion County Health Officer in Oregon addressed regularly his community health classes at Oregon State University.

Dr. Anderson was invited by the American Medical Association to serve as a consultant and panel member at their annual

convention in Chicago on October 8-11, 1969. The conference theme was "Medical Care Services for School Age Children." The meeting was attended by physicians, parents, public health officials and school administrators from throughout the nation.

### Other Scientific Organizations

In 1946, Dr. Anderson became a member of the American Association for the Advancement of Science, currently the largest scientific society in the United States. Membership includes about 300 scientific societies, professional organizations, state, and local scientific academies (Fisk, 1973).

In 1950, Dr. Anderson joined a society of teachers and researchers, the American Society of Human Genetics. He read an article he had written earlier at a meeting of the Society, entitled "Reduced Penetrance in the Inheritance of Cortical Cataract." The article was published by the Journal of Heredity in 1949.

Interest in youth and child development research stimulated Dr. Anderson in 1955 to join the Society for Research in Child Development, a professional interdisciplinary society including anatomists, anthropologists, dentists, educators, pediatricians, physiologists, nutritionists, psychiatrists, psychologists, sociologists, and statisticians.

Dr. Anderson joined the Gerontological Society in 1958 in the

interest of improving the well-being of older people by promoting scientific study of the aging process. At the 1959 annual meeting of the Gerontological Society in Los Angeles, Dr. Anderson became acquainted with several European Gerontologists, many of whom he visited on his sabbatical leave in 1960.

### Addresses

During his professional career, Dr. Anderson was asked to address organizations including the Oregon Speech and Hearing Association; the Corvallis High School Parent-Teachers Association; the Southwest Districts of the American Association for Health, Physical Education, and Recreation; the National Dairy Council, the Freemason lodges in Utah and Oregon; a Freemason lodge in London, England; the Northwest District of the American Association for Health, Physical Education, and Recreation; and the American Public Health Association. Dr. Delbert Oberteuffer (1973), a colleague and Professor of Health and Physical Education at Ohio State University, remarked: "I have been in Dr. Anderson's audience at conventions many times and developed a high regard for his scholarship."



### Conclusion

In all of the official voluntary and professional health organizations of which he was a member, Dr. Anderson participated in a role primarily as an organizer and as a chairman of committees. By his example and dedication he persuaded his students to join organizations important to their professional advancement. In his judgment, members of the health profession are obligated to serve with professional organizations. By his own service, he acquired knowledge of the total health program, knowledge he disseminated to his students. From the beginning of his professional career until his retirement, Dr. Anderson demonstrated his belief in service through his participation with health organizations.

## VI. RETIREMENT AND HONORS

During his later professional years, Dr. Carl Anderson witnessed the continued expansion of the Health Department at Oregon State University. Although eligible for retirement in 1966, he was retained as Department Head until 1969 and he continued teaching until 1971. Retirement meant freedom to read, write, revise textbooks, and to serve the official and voluntary health organizations.

He was recognized through the years by several honor societies and by national and international biographical directories, including the American Men and Women of Science, Contemporary Authors, International Biographies, Marquis Who's Who, and Men of Achievement.

With his wife, Dr. Anderson travels, participates in church government, and improves his home with antique furnishings.

### Retirement

Dr. Anderson retired in 1966 when many Americans were weary of a seemingly endless Vietnam War in which they could see little reason for American involvement (Roswenc, 1973). In accordance with provisions of the Public Employees Retirement System, Dr. Anderson could retire at the age of 65, which he reached in

February, 1966. Dr. James Long, Director of the Division of Health and Physical Education, recommended to the university administration that Dr. Anderson's administrative duties continue until June 15, 1969, and that he be allowed to continue as a member of the teaching faculty until he reached the age of 70, in 1971 (Long, 1968).

In February, 1971, he was officially retired, and was granted the title of Professor Emeritus of Health by President Robert MacVicar. He continued to teach for the remainder of the academic year without full monetary compensation.

Several letters of congratulations and appreciation were sent to him from administrators of the university and the administrative government of Oregon, including one from Oregon Governor Tom McCall and another from Clay Myers, Secretary of State.

Governor McCall (1971) said:

Warm congratulations to you on your retirement. No mere letter could express the gratitude of your government, and the citizens of Oregon, for the many years of dedicated service you have given to your state. . . .

A letter from Clay Myers (1971) stated:

As you retire from your many years of service to the state of Oregon, I want you to know how deeply we in the state government appreciate both the quality of your contribution and the years you have devoted to helping your fellow Oregonians. . . .

Retirement from Oregon State University marked the end of 22 years of devoted service to the Department of Health. As a new

Professor Emeritus, he found it somewhat difficult to slow the pace he had maintained for so many years. It was inconceivable that a man of Dr. Anderson's vitality and ambition could withdraw completely from professional activity. He continues to act as a consultant in the Department of Health and to do research for his books.

In a letter to this writer written on January 11, 1972, Dr.

Anderson described his retirement this way:

As you doubtless understand, I am busy as usual but with this difference. I do not have to live by the hands of the clock and can pace myself pretty much as I please. I have time for writing and time for other things such as serving on doctoral committees. . . . Last week I sent the index for the fifth edition of School Health Practice . . . . I am working on the second edition of Community Health now.

The revised edition of Community Health was published in May, 1973, and included new material on human ecology, sociology, drugs, and geriatrics.

Dr. Anderson's senior years were especially brightened in the fall of 1972, when he received the Oregon State University Alumni Association Distinguished Professor Award. The annual award, a \$1,000 alumni donation, was presented to him at the Oregon State University Faculty Day, September 14, 1972, in recognition of professional achievement through teaching, scholarship, and service to both the public and the university ("Teachers honored. . .", 1972).

Dr. Anderson's nomination for the Alumni Association Distinguished Professor Award was made by Dr. James Long and



Figure 6. O.S.U. Alumni Association Distinguished Professor Award, Faculty Day, 1972

reviewed by an anonymous panel which made the final recommendations to President Robert MacVicar.

### Honor Societies

During his long professional career several national honor societies invited Dr. Anderson's membership because of his professional and scholarly distinction.

In 1928, when he graduated from the University of Michigan, Dr. Anderson was selected by a scholastic honorary, Phi Kappa Phi, an organization in which he remained active throughout his professional life. In 1957 he was elected president of the Oregon State College chapter of Phi Kappa Phi, a distinction accorded only to faculty who have achieved outstanding recognition in their field of study and teaching (Carlson, 1957).

Phi Delta Kappa, a scholarly education honorary, invited Dr. Anderson to membership during graduate school days at the University of Michigan in 1933. His work with the Michigan Department of Health during those graduate years earned him an invitation, in 1933, to join a public health honorary, the Delta Omega.

Sigma Xi, a science honorary, composed of about 175,000 scientists, researchers, and educators in the United States, selected Dr. Anderson as a member in the spring of 1949 when

he was teaching the biological sciences and writing articles for scientific periodicals and journals.

Because of his dedicated service since 1937 to the areas of health and physical education, he was asked to join the Academy of Physical Education. The Academy, which maintains a limited membership of 100, was organized to recognize persons of achievement in health and physical education and to provide a forum for discussion of problems related to these fields (Fisk, 1973b).

#### Biographical Directories

Biographical directories document history by providing records of achievements of persons whose works are considered worthy. The editors of such directories as the Marquis American Men and Women of Science and Contemporary Authors selected a synopsis of the life of Dr. Anderson for inclusion in their volumes. In 1973 Dr. Anderson was included in the Dictionary of International Biography, published in Cambridge, England. He was surprised and pleased that same year to be chosen as one in 10,000 to be included in the Who's Who in America. Dr. Anderson had also been listed in the 1948 Who's Who in the Mid-West and in the 1964 edition of Who's Who in the West.

### Family After Retirement

Although freed from deadline pressures and classroom schedules, Carl Anderson and his wife Alyce continue to live as much as they always had. After the Andersons considered a life of retirement in California, they decided to remain in Corvallis. There they are able to visit Janis in Seattle and Hayes in San Diego with a minimum of travel. They continue to enjoy many cultural activities in Portland and Corvallis.

### High School Reunions

Of the 79 students graduated from Ironwood High School in 1918, 53 were still living in July, 1973. Thirty-four, including Carl Anderson, attended the 50th class reunion in 1968, and 35 attended in 1973 to celebrate their 55th reunion. He was chairman of the 1973 reunion. Dr. Anderson (1973, p. 9) prepared an address entitled "Those Incredible Years," an 11-page documentary describing historical milestones from 1918 to 1973. In his presentation he stated: "We live in the most fantastic period in all recorded history." He reminded the class that, they have witnessed the ends of two world wars; the doubling of population from 105, 000, 000 in 1918 to 211, 000, 000 in 1973; the expansion of education so that more than 60, 000, 000 children currently attend schools; the growth of motor



vehicles from 8, 000, 000 in 1918 to 110, 000, 000 in 1973; the assassination of spiritual and political leaders; and the developments in science and medicine including the control of many communicable diseases; and the performance of organ transplants and open heart surgery.

He concluded the address with the following remarks:

It would be interesting to know, even to speculate, what historians 100 years from now will say about this epoch. One thing they could honestly report is that there was little reason to be bored.

### Church

Carl Anderson and his wife attend Sunday worship regularly at the First Congregational Church (United Church of Christ) in Corvallis. He is a member of the Diaconate Board which includes 12 deacons and deaconesses, the pastor, other ministers on the staff, and a moderator and vice-moderator. The Diaconate has general jurisdiction over the spiritual life of the church, acts for the church in charity, and helps to administer communion (First Congregational Church, 1973).

Dr. Alfred R. Slighter (1973), pastor of the First Congregational Church, said about his parishioner, Dr. Anderson:

He is always ready to respond, even if busy, to serve the church. He had addressed the various church groups on population explosion, death and dying, and other health-related matters. . . .



Figure 7. 50th Senior Class Reunion, Ironwood High School, 1968.

Dr. Anderson is loyal, unobtrusive and avoids pushing himself forward to call attention to himself. He is not a grumbler or complainer and doesn't talk about his own physical liabilities. . . . When you talk to Dr. Anderson, he listens and is interested in you. . . .

### The Anderson Home

In retirement, Dr. Anderson has been rewarded for his long career as department head and as a successful textbook author. He and Alyce are able to continue to indulge themselves in their hobby of collecting fine antiques and art objects.

Their home is described by Peter J. Batten (1973), a physician friend as "unpretentiously gorgeous." Tastefully grouped are an inlaid table from India, a desk and chair from France, and other antique pieces collected from countries throughout the world.

Both Andersons take particular pride in their three antique Sonorie wall clocks from Vienna, a Fusee table clock, wound automatically by a cord rather than by springs; and grandfather, grandmother, and granddaughter clocks. Conversation comes to a polite halt when the seven clocks announce the hours.

Several original paintings in massive, ornate gold-leaf frames, hang on the walls of the seven-room home. Another Anderson treasure is a portrait bust sculptured in Florence in 1680. Called the "Veiled Lady", it is delicately carved in white Italian marble to give the illusion of a lovely woman whose face is softly veiled.

Their home is carpeted with colorful Oriental rugs which enhance the unusual furnishings.

### The Future

The responses from Professor Emeritus Carl L. Anderson during an interview on June 17, 1974, suggest that his professional life is not over. He is planning another trip to Europe to collect more material for textbooks and journal articles. He plans to continue his volunteer work with the Oregon Heart Association and the State Department of Education, and he will attend meetings of many professional health organizations. He hopes to continue to share his expertise with others as a member of the academic community at Oregon State University.

### Conclusion

Retirement from Oregon State University with the title of Professor Emeritus in 1971 and Distinguished Professor in 1972, was by no means the end of Dr. Anderson's career. He was selected to be included in several outstanding biographical directories by their publishers. His work continues with official, voluntary and professional health organizations, and he plans to travel, write and enjoy tasks that might be arduous for some men half his age.

## VII. SUMMARY AND CONCLUSIONS

### Summary

This study investigated the professional life and career of Dr. Carl Leonard Anderson and correlated his contributions to public health and health education. A review of literature showed that few health educators have been the subjects of biographies.

Carl Leonard Anderson was born and raised in Ironwood, Michigan. He was graduated from the University of Michigan in 1928 with a degree in Education. For two years he taught high school health classes in Grosse Ile, Michigan. Married to Alyce Stapleton, he returned in 1932 to the University of Michigan graduate school where he earned his master's and doctor's degrees in Public Health. He then worked for a year in the Public Health Department in Fremont and West Branch, Michigan. For ten years he was head of the Department of Physiology, Hygiene, and Public Health at Utah State College. Following the World War II years, he took a position at Cortland State Teachers College one year, Michigan State University for four years and finally a permanent assignment as head of the Department of Health at Oregon State University.

Because Dr. Anderson left public health work in 1935 for the classroom, this study is largely concerned with his contributions

to health education.

In his capacity as a professional health educator, Dr. Anderson inspired many of his students. Testimonials from former students and advisees verify his sense of integrity and sincere interest in students. His knowledge and inspiration as a teacher can be measured by the progress of former students; such as Jan Underwood, Juanita Browning, and Norman Hoffman, as they teach health or work in the field of public health. The competence of his teaching was demonstrated in classes by his ability to emphasize the important and condense less important information, and his ability to conduct discussions and to answer questions completely and thoroughly.

The professional publications and textbooks prepared by Dr. Anderson represent a composite of the professional qualities he envisioned for the future of health. His textbooks have been used by more than a quarter of a million people nationally and internationally.

In working with official and voluntary health organizations, one of Dr. Anderson's greatest contributions has been to the Oregon Heart Association, where he dedicated many hours to the School Health Committee for more than a decade. Of the many professional organizations of which he is a member, his most significant accomplishments have been to the Oregon Association for Health,

Physical Education, and Recreation, where he developed teacher education standards in health, and promoted honor awards for the association. He also contributed to the Northwest District of the American Association for Health, Physical Education, and Recreation by serving on a council for developing teacher education standards for health, physical education, and recreation. He served national and international organizations as a speaker and consultant at conferences and meetings of such organizations as the American Public Health Association, the American Medical Association, and the World Health Organization.

Dr. Anderson spent much time in the Oregon State Department of Education to improve both educational requirements for health teachers and the health curricula in the public schools. With the Oregon State Department of Human Resources, Health Division, he served on the Governor's Committee on Aging, earning him recognition by educators and government officials of the state of Oregon. In all of these organizations, Dr. Anderson played a major role as a chairman of committees.

Dr. Anderson was a member of the Oregon State University Faculty Senate for 15 years. He was vice-chairman of the Senate twice, and chairman of several committees, the most significant being the Committee for the Advancement of Teaching.

One of Dr. Anderson's most significant accomplishments at

Oregon State University was the development of an excellent Department of Health through the careful selection of qualified teachers with advanced degrees. All staff members possessed qualifications in school health education, and the majority had background preparation in public health. He became interested in environmental problems years before environmental health was a major concern in the United States. As a result of his interest in environmental studies, the Department of Health was among the first to develop a curriculum in this area. With his colleagues, Dr. Anderson developed a departmental health curriculum which included 29 courses in three major areas: school health education, environmental health, and community health. Under his guidance the graduate program developed, and his department became the first to award advanced degrees in the Division of Health and Physical Education.

Dr. Anderson's well-organized, thorough, and efficient approach to tasks exemplified his professional competence. He administered his department, taught his classes, attended committee meetings, organized workshops, and composed his textbooks without apparent stress. His diversity of academic and cultural interests makes Dr. Anderson capable of conversing on a wide variety of subjects. His memory for names, dates, and events is considered remarkable by his students and colleagues.

Dr. Anderson's life was not void of problems or errors



during his career as is evidenced by the indifferent success of a number of his projects.

Perhaps the one unique aspect of Carl Anderson's personality is his insatiable interest in promoting new ideas and projects. In retirement, he continues to read, write, and research information for revising his books. Carl Anderson's interest in health education continues in his retirement. He is still pursuing his philosophy of man's service to man through his activities with the official, voluntary, and professional health organizations and his service to the Department of Health at Oregon State University.

### Conclusions

On the basis of the data gathered and presented, the following conclusions can be reached:

1. The impact and contributions of Dr. Carl L. Anderson were dependent upon other academic interests such as writing, participating on committees, and serving official, voluntary, and professional health organizations.
2. The contributions of Dr. Carl L. Anderson were largely determined by the role he played as Head of the Department of Health at Oregon State University from 1949 to 1971.
3. The life and career of Dr. Carl L. Anderson contributed to the development of public health, but more significantly, to

health education.

What kind of man is Carl Leonard Anderson? Those who know him need not ask; but those who do not, can best know the answer through the following words by a prominent figure in health, physical education, and recreation, Jay B. Nash:

The happy man, the healthy man, the normal man, and the busy man are one, busy but not cramped, active but with sufficient glide for recuperation.

The happy man will be the one who has accomplished and is still advancing. The rung of a ladder was never meant to rest upon but merely a vantage place from which to take the next step (Jessup, 1967).

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University, Health Science Department. Personal communication. Provo, Utah. December 1, 1972.

## APPENDICES

## APPENDIX I

## BIOGRAPHIES REVIEWED FOR THE STUDY:

<u>Author</u>	<u>Title</u>	<u>Date</u>	<u>Profession</u>
Fuller, Richard C.	George Romney and Michigan	1966	Politics
Jessup, Harvey M.	Jay B. Nash: his contributions and influences in the fields of physical health, recreation, camping and outdoor recreation	1967	Health, physical education and recreation
Knipping,, Paul A.	Clair E. Turner and the growth of health education	1970	Health education
Landon, John W.	A biography of Jesse Crawford, the poet of the theatre pipe organ	1972	Music
Patti, Anthony V.	C. Ward Crampton, M.D.: pioneer in health and physical education	1962	Health and physical education
Peterson, Hazel C.	Dorothy Ainsworth: her life, professional career and contributions to physical education	1968	Health and physical education
Ranta, Vicki E.	H. Harrison Clark: his life and contributions to physical education	1969	Health and physical education
Steckman, Mildred C.	Harl Roy Douglass: A biography	1970	Secondary education
Trekell, Mariana	Gertrude Evelyn Moulton, M.D.: her life and professional career in health and physical education	1962	Health and physical education
Welch, Joseph E.	Edward Hitchcock, M.D., founder of physical education in the college curriculum	1962	Health and physical education

## APPENDIX II

PERSONAL COMMUNICATIONS AND QUESTIONNAIRES TO  
INVESTIGATOR FROM COLLEAGUES:

- |                         |                           |
|-------------------------|---------------------------|
| 1. Adrian, Walter M.    | 19. Mayshark, Cyrus       |
| 2. Anderson, Karl       | 20. Mills, Creswell A.    |
| 3. Bailey, Sam H.       | 21. Moser, Fay            |
| 4. Bergstrom, Robert W. | 22. Moss, Bernice R.      |
| 5. Byrd, Oliver E.      | 23. Moore, Robert R.      |
| 6. Carlisle, John C.    | 24. Neilson, N. P.        |
| 7. Castle, Emery N.     | 25. Nelson, Dale          |
| 8. Ehm, Josephine       | 26. Oberteuffer, Delbert  |
| 9. Falloon, Golda L.    | 27. Osgood, Sam B.        |
| 10. Fross, Horton L.    | 28. Patterson, Wade       |
| 11. Foote, Wilson H.    | 29. Polen, Betty R.       |
| 12. Goode, Delmer M.    | 30. Reeves, G. Spencer    |
| 13. Hein, Fred V.       | 31. Ross, Ken             |
| 14. Hunsaker, Hiram B.  | 32. Rugen, Mabel          |
| 15. Houston, Robert J.  | 33. Smith, Warren E.      |
| 16. Haar, Frank B.      | 34. Southworth, Warren H. |
| 17. Lambert, Charlotte  | 35. Washke, Paul R.       |
| 18. Long, James W.      | 36. Watters, Ray          |

February 22, 1973

Dear (colleague)

Dr. Carl L. Anderson, Professor Emeritus and Head of the Department of Health at Oregon State University, has consented to allow me to write a historical biography of his life and contributions to public health and health education. This study will be preserved for posterity in the form of a doctoral dissertation. In developing this dissertation, I have spent several hours with Dr. Anderson recording his thoughts, ideas and philosophy. He suggested that I write to you for more information concerning his contributions. It is my desire to be as objective as possible in my research. Therefore, I believe it is important to obtain necessary information from you.

Knowing that you have been associated with Dr. Anderson, I am sure you can contribute valuable data for my study. It would facilitate my collection of data if you would reply to the enclosed questionnaire. Please indicate, too, if you have any objections to direct quotations from your responses. Proper acknowledgement will be given to you in my thesis.

I live in Spokane, Washington, and teach at Eastern Washington State College but I am planning to spend the summer in Corvallis, Oregon, collecting data. If you feel that a personal interview would be more beneficial than answering by questionnaire, or, if you want me to call on you personally, please indicate on the attached form.

If possible, please return the questionnaire to me by March 15th. Enclosed is a self-addressed, stamped envelope for your convenience. It is with your assistance that a complete biography can be done about this distinguished leader, Dr. C. L. Anderson. Thank you for your cooperation.

Sincerely,

Virginia M. Asan  
Assistant Professor  
Department of HPERA

encl.



QUESTIONNAIRE REGARDING DR. CARL L. ANDERSON:

(If necessary, use back of page)

1. YOUR PERSONAL INFORMATION:

Name \_\_\_\_\_ Position \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

2. In what capacity were you or are you associated with Dr. C. L. Anderson?

When? (dates)

3. What do you consider to be the Three (or more) most important contributions Dr. Anderson has made to Health Education (this includes Public Health and Physical Education)?

4. In your opinion, what traits does Dr. Anderson possess which make up a unique personality, e.g., creativity, interest in others, physical endurance, intellectual curiosity, perseverance, etc.?

5. Could you relate any anecdotes or events which would exemplify Dr. Anderson's personality and/or philosophy?

6. Is there any additional information which could add to the completeness of Dr. Anderson's biography?

7. Could you suggest others whom you feel should be contacted for information about Dr. Anderson? (Please give names and addresses)

Name

Address

\_\_\_\_\_  
\_\_\_\_\_

Please check the following:

- \_\_\_\_\_ 1. No objection to being directly quoted.  
\_\_\_\_\_ 2. Prefer only general acknowledgement.  
\_\_\_\_\_ 3. I would like a personal interview in addition to this questionnaire. Please call me at

\_\_\_\_\_  
(area code) (phone number) (city) (state)

Additional comments:

\_\_\_\_\_  
Signature

## APPENDIX III

## QUESTIONNAIRES TO INVESTIGATOR FROM STUDENTS

- |                         |                          |
|-------------------------|--------------------------|
| 1. Anderson, James E.   | 16. Inman, Beth          |
| 2. Barr, Merle E.       | 17. Keller, Michael W.   |
| 3. Belli, June          | 18. Koll, William        |
| 4. Benson, Jack         | 19. McAfee, Donald C.    |
| 5. Berg, William J.     | 20. McArthur, William D. |
| 6. Brennan, William J.  | 21. Rhodes, Ronald L.    |
| 7. Browning, Juanita D. | 22. Schlaadt, Richard C. |
| 8. Buckwalter, Raymond  | 23. Seale, Paul S.       |
| 9. Carty, Jay J.        | 24. Shaw, Donald D.      |
| 10. Covey, Robert       | 25. Sirnio, George       |
| 11. Finley, Ronald L.   | 26. Smith, Robert B.     |
| 12. Fors, Stuart W.     | 27. Underwood, Jan R.    |
| 13. Haase, Ronald       | 28. Vaughn Terrance L.   |
| 14. Hoffman, Norman S.  | 29. Vischansky, Ann M.   |
| 15. Hosokawa, Mike C.   |                          |

October 10, 1973

Dear           (student)          

Dr. Carl L. Anderson, Professor Emeritus and Head of the Department of Health at Oregon State University, has consented to allow me to write a historical biography of his life and contributions to public health and health education. This study will be preserved for posterity in the form of a doctoral dissertation. In developing this dissertation, I have spent several hours with Dr. Anderson recording his thoughts, ideas and philosophy. He has suggested I write to you for more complete information concerning his contributions. It is my desire to be as objective as possible in doing my research. To enable me to do this, I feel it is important to obtain necessary information from you.

According to information provided me by Dr. Anderson, you were a former student and advisee of his at Oregon State University. Knowing this, I am sure you can contribute valuable data for my study. It would facilitate my collection of data if you would reply to the questionnaire enclosed with this letter.

If possible, please return the questionnaire to me by November 10th. Enclosed is a self-addressed, stamped envelope for your convenience. It is only through your assistance that a complete biography can be done about this distinguished leader, Dr. C. L. Anderson. Thank you for your cooperation.

Sincerely,

Virginia M. Asan  
Assistant Professor  
Department of HPERA

encl:

## APPENDIX IV

## PERSONAL TAPED INTERVIEWS BY INVESTIGATOR WITH:

1. Albin, Betty J. on July 9, 1973 - Salem, Oregon
2. Anderson, Alyce E. on April 16, 1974 - Corvallis, Oregon
3. Anderson, Carl L. on: July 12, 1973; July 13, 1973; July 15, 1973; July 24, 1973; August 13, 1973; August 14, 1973; June 28, 1974; July 5, 1974; July 17, 1974 - Corvallis, Oregon
4. Anderson, Gordon W. on July 31, 1973 - Corvallis, Oregon
5. Anderson, Hayes L. on August 8, 1973 - Corvallis, Oregon
6. Batten, Peter J. on July 19, 1973 - Salem, Oregon
7. Braden, Max W. on August 17, 1972 - Portland, Oregon
8. Ellis, John K. on August 7, 1973 - Corvallis, Oregon
9. Foster, Roy A. on July 25, 1973 - Corvallis, Oregon
10. Gilfillan, F. A. on July 24, 1973 - Corvallis, Oregon
11. Hansen, Henry P. on July 18, 1973 - Corvallis, Oregon
12. Johnson, Janice A. on April 13, 1974 - Corvallis, Oregon
13. Koski, William A. on July 11, 1973 and July 27, 1973 - Corvallis, Oregon
14. Langton, Clair V. on April 6, 1973 - Spokane, Washington
15. Lemon, Erwin B. on July 30, 1973 - Corvallis, Oregon
16. Livingston, Harold M. on July 26, 1973 - Corvallis, Oregon

17. Livingston, Robert on July 10, 1973 - Monmouth, Oregon
18. Mc Arthur, William D. on July 10, 1973 - Monmouth Oregon
19. Nicodemus, David B. on July 19, 1973 - Corvallis, Oregon
20. Poling, Dan W. on July 26, 1973 - Corvallis, Oregon
21. Ross, Kenneth on August 17, 1972 - Portland, Oregon
22. Sahlin, Nancy A. on August 7, 1973 - Barrington, Illinois
23. Slighter, Alfred R. on July 27, 1973 - Corvallis, Oregon
24. Sparks, Lestle on June 28, 1973 - Salem, Oregon
25. Stroud, Howard J. on August 16, 1972 - Portland, Oregon
26. Zeran, Frank R. on August 2, 1973 - Corvallis, Oregon

## APPENDIX V

UNDERGRADUATE COURSES OF CARL ANDERSON AT THE  
UNIVERSITY OF MICHIGAN (1924-1928):School of Medicine

Physiology	Social Psychiatry
Anatomy	Mental Hygiene of Adolescence
Pediatrics	

School of Engineering

Water Works	Municipal and Industrial Sanitation
Illumination and Photo-	Analytics
metry	Calculus

Division of Hygiene, Public Health and Physical Education

Principles of Nutrition	Personal Hygiene
Oral Hygiene	Epidemiology
Public Health Education	Vital Statistics
and Publicity	Physical Education
Rural Health Adminis-	Methods and Materials in Health
tration	Education
Research and Investi-	
gation	

School of Education\*

Educational Psychology  
 Introduction to Secondary Education  
 Philosophy of Education  
 Teaching Special Subjects  
 Psychology of Learning

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\* Carl earned a Lifetime Teaching certificate for completing 15 hours of Education.

College of Literature, Science and the Arts

American Government	Rhetoric
Political Science	Advanced Composition
History of Great Britain	Chemistry
English	Zoology
General Psychology	Botany
Advanced Psychology	Philosophy
Psychological Points of View	Psychology of Adolescence
Economics	Sociology
Modern Languages	Public Speaking
(French and German)	Psychology of Child Development
Principles of Social Case Work	Measurement in Personality
Problems of Poverty and Dependency	Seminar in Clinical Psychology
	Child Guidance

## APPENDIX VI

## DEPARTMENT OF HEALTH COURSES AVAILABLE TO UNDER-GRADUATE AND GRADUATE STUDENTS AT OREGON STATE UNIVERSITY (1971-1972):

Personal Health (H. 160 and H. 170)  
Introduction to Health Education  
Special Studies  
School Health Education  
School Health Services  
Sanitation  
Communicable and Noncommunicable Diseases  
First Aid  
Safety Education  
Research (G)  
Thesis (G)  
Reading and Conference (g)  
Seminar (G)  
Workshop (G)  
Community Health Promotion (G)  
Community Health Services (G)  
Health Agencies and Programs (G)  
Environmental Health (G)  
Control of Chronic Disease (G)  
Health Aspects of Gerontology (G)  
Health Services Programs (G)  
Health Instruction Programs (G)  
Sex Education (G)  
Health of the School-Age Child (G)  
Physical Growth and Development (G)  
Epidemiology (G)  
School Health Administration (G)  
Community Health Education (G)  
Driver Education and Training (G)



QUESTIONNAIRE REGARDING DR. CARL L. ANDERSON:

1. Specifically, what dates were you associated with Dr. Anderson?
2. From your recollection of him as a teacher, what were some of his particular strengths and/or weaknesses?
3. Please describe what influence this might have had upon you.
4. What do you consider to be his significant contributions to the development of Public Health and Health Education?
5. What traits does Dr. Anderson possess to make up his unique personality?
6. Can you relate any anecdotes which would exemplify his personality and/or philosophy?
7. What is your present position?
8. Since graduation from Oregon State University, what positions have you held and where?
9. Would you recommend others to contact who would provide information about Dr. Anderson?

NameAddress

10. Please check the following:

☐ No objection to being directly quoted.  
☐ Prefer only general acknowledgment.