



1956

## Evaluation of health textbooks for seventh and eighth grades

Marian Malissa Herbert  
*University of the Pacific*

Follow this and additional works at: [https://scholarlycommons.pacific.edu/uop\\_etds](https://scholarlycommons.pacific.edu/uop_etds)



Part of the [Education Commons](#)

---

### Recommended Citation

Herbert, Marian Malissa. (1956). *Evaluation of health textbooks for seventh and eighth grades*. University of the Pacific, Thesis. [https://scholarlycommons.pacific.edu/uop\\_etds/1319](https://scholarlycommons.pacific.edu/uop_etds/1319)

This Thesis is brought to you for free and open access by the Graduate School at Scholarly Commons. It has been accepted for inclusion in University of the Pacific Theses and Dissertations by an authorized administrator of Scholarly Commons. For more information, please contact [mgibney@pacific.edu](mailto:mgibney@pacific.edu).

COLLEGE OF THE PACIFIC  
STUDENT COUNCIL  
EVALUATION OF HEALTH TEXTBOOKS 2  
FOR SEVENTH AND EIGHTH GRADES

---

A Thesis  
Presented to  
the Faculty of the Department of Education  
College of the Pacific

40018  
JUN 20 1956  
LIBRARY  
2-4008  
JUN 20 1956

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

---

by  
Marian Malissa Herbert  
1956

## TABLE OF CONTENTS

| CHAPTER  | PAGE |
|--|------|
| I. INTRODUCTION . . . . .                            | 1    |
| The relationship of general education to             |      |
| health education . . . . .                           | 1    |
| Health education and the learning process . .        | 2    |
| Health textbooks as tools to the learning            |      |
| process . . . . .                                    | 5    |
| II. THE NATURE OF THE STUDY , . . . .                | 8    |
| Statement of the problem . . . . .                   | 8    |
| Purpose of the investigation . . . . .               | 9    |
| Importance of the study . . . . .                    | 9    |
| Limitations of this study . . . . .                  | 10   |
| Procedures . . . . .                                 | 11   |
| Sources of data . . . . .                            | 11   |
| Previous related studies . . . . .                   | 12   |
| III. HEALTH NEEDS OF IMPORTANCE TO THE EVALUATION OF |      |
| HEALTH TEXTBOOKS . . . . .                           | 16   |
| Determining health needs . . . . .                   | 16   |
| Determining health needs of seventh and              |      |
| eighth grade pupils . . . . .                        | 22   |
| IV. SIGNIFICANT HEALTH INTERESTS FOR TEXTBOOK        |      |
| SELECTION . . . . .                                  | 26   |
| Developmental characteristics of seventh and         |      |
| eighth grade pupils . . . . .                        | 26   |

|   |      |
|---|------|
|   | 111  |
| CHAPTER   | PAGE |
| Health interests and developmental characteristics . . . . .                                  | 28   |
| Learning experiences for health instruction . .   | 33   |
| V. ORGANIZATION OF THE INVESTIGATION . . . . .  | 41   |
| Evaluating the range and coverage of topics . .   | 41   |
| Evaluating aids in the use of the texts . . . .   | 43   |
| Evaluating physical features . . . . .  | 47   |
| VI. RESULTS OF INVESTIGATION . . . . .  | 50   |
| Range and coverage of topics . . . . .  | 50   |
| Aids in the use of the texts . . . . .  | 53   |
| Physical features . . . . .   | 54   |
| Composite scores . . . . .  | 54   |
| Rank order of texts on range, coverage, aids,<br>physical features and composite scores . . . | 56   |
| VII. SUMMARY AND CONCLUSION . . . . .   | 58   |
| Limitations . . . . .   | 58   |
| Summary . . . . .   | 59   |
| Conclusion . . . . .  | 62   |
| Recommendations . . . . .   | 68   |
| BIBLIOGRAPHY . . . . .  | 70   |
| APPENDIX A . . . . .  | 75   |
| Health textbooks evaluated . . . . .  | 76   |
| APPENDIX B . . . . .  | 78   |
| Bibliography of authoritative sources on health<br>needs . . . . .                            | 79   |



CHAPTER

PAGE

APPENDIX C . . . . . 81

Health interest check list, Stockton Schools . . 82

## LIST OF TABLES

| TABLE   | PAGE |
|---|------|
| I. Health Needs of Significance for Health  |      |
| Instruction . . . . .   | 18   |
| II. Health Interest Check List . . . . .  | 35   |
| III. Summary of Findings on Health Needs and Interests  |      |
| Seventh and Eighth Grade Pupils . . . . .   | 40   |
| IV. Range and Coverage of Topics . . . . .  | 42   |
| V. Aids in the Use of the Texts . . . . .   | 46   |
| VI. Physical Features of the Texts . . . . .  | 48   |
| VII. Composite Scores . . . . .   | 55   |
| VIII. Rank Order of Texts on Range, Coverage, Aids,<br>Physical Features and Composite Scores . . . . . | 57   |

## LIST OF FIGURES

| FIGURE   | PAGE |
|--|------|
| 1. Percent to Which Texts Score Above Average on<br>Coverage of Topics . . . . . | 44   |
| 2. Scores on Range of Topics . . . . .   | 44   |

## CHAPTER I

### INTRODUCTION

#### THE RELATIONSHIP OF HEALTH EDUCATION TO GENERAL EDUCATION

Education is changing behavior. It strives to influence the lives of people, to affect their way of doing things, and to transmit knowledge on improved ways of living.<sup>1</sup> The ultimate goal of education is to influence conduct in the light of knowledge so that man can better control his environment, live a more satisfying enjoyable life, and be a contributing member of society.

The schools of today in a democratic society must do more than teach subject matter. It is their responsibility to prepare the child for life in a democratic state, in a society in which he must have an educated mind and a self-disciplined, self-reliant, socially minded personality. Education must include those experiences that give understanding and practice in effective citizenship in a democracy.

Health education in its broadest meaning, "that quality of life that renders the individual fit to live most and serve best,"<sup>2</sup> becomes a major function of education.

---

<sup>1</sup>Delbert Oberteuffer, School Health Education (New York: Harper & Brothers, 1949), p. 4.

<sup>2</sup>Jesse F. Williams, Personal Hygiene Applied (Philadelphia: W. B. Saunders Company, 1941), p. 2.

The purposes of health education should be in harmony with the broader purposes of education. Health education contributes a great deal to the development of the individual in a way that is satisfying to himself, and helps him to be a contributing member of a democratic society. Education in healthful living should be one of the main objectives of any school program.

The Commission on Health in Schools, of the American Association of School Administrators, in considering the importance of health education and its purpose states that:

Health education as applied to the school then resolves itself into creating and maintaining those conditions, experiences, and opportunities that will enable each individual connected with the school to do his best work with maximum of satisfaction and enjoyment to himself and to society during both school and post-school life.<sup>3</sup>

Health education is an integral part of the total educational program and justifies this position only as it does contribute to the aims of general education.

#### HEALTH EDUCATION AND THE LEARNING PROCESS

Not only should the purposes of health education be in harmony with the broader purposes of education but

---

<sup>3</sup>Commission on Health, "Health in Schools", Twentieth Year Book (Washington, D. C.: American Association of School Administrators, 1942), p. 15.



Grout<sup>4</sup> insists that the method and content be guided by an understanding of the learning process.

If education means changing behavior how is the pupil going to be motivated to change in terms of knowledge he has acquired? Educational psychologists stress the necessity of making the school experiences meaningful to the learner if learning is to take place. The learner is motivated if he is interested in what he is learning, if it satisfies a felt need or developmental urge, if the goal is self-set, if what he learns satisfies a desire for social improvement, if it gives him a feeling of personal worth and helps him in his quest for success.

According to Grout, "In all effective learning interest and purpose hold a prominent place."<sup>5</sup>

#### SIGNIFICANCE OF THE LEARNING PROCESS FOR HEALTH EDUCATION

To impart knowledge concerning health is not enough. Oberteuffer says, "Whether learning becomes effective in the pattern of living depends in part on how knowledge is acquired."<sup>6</sup> Health must be made functional in the life of

---

<sup>4</sup>Ruth E. Grout, Health Teaching in Schools (Philadelphia: W. B. Saunders Co., 1948), p. 85.

<sup>5</sup>Ibid., p. 66.

<sup>6</sup>Oberteuffer, op. cit., p. 49.



the pupil if he is to change his health behavior. Making health functional involves the laws of learning--readiness, timeliness, motivation.<sup>7</sup>

In the health instruction program the organization of learning experience should be directed toward those experiences that are in keeping with the characteristics of a particular group. What are the needs, the developmental urges, the maturity level of a particular group?

Relating learning experience in health to present-day health problems gives the instruction a timeliness that is of importance to the learner.

Having experience in a national or local health problem creates more interest, seems more vital to the learner than having the same problem taught as an academic subject unrelated to an active program.

Learning is dependent upon motivation. Whether the learner feels a driving force, is interested, is the important factor if learning is to take place. To change and improve health behavior, the ultimate goal of health education, acknowledgment and use must be made of this motivating force within the learner. If the individual is interested, feels keenly the urge to learn, he will be motivated to acquire the knowledge, skills and habits that will improve his health behavior.

---

<sup>7</sup>Grout, op. cit., pp. 66-71.

The methods and materials that are used must be interesting, intelligible, and satisfying to the pupil.<sup>8</sup> Classroom methods that influence the acquiring of health knowledge, skills, habits, and attitudes must provide an experience in healthful living. Tools or materials for the learning experience are many and varied but all must be interesting, satisfying, and educationally valuable to the learner.

#### HEALTH TEXTBOOKS AS TOOLS TO THE LEARNING PROCESS

It is toward the problem of textbooks as tools in the learning process in a functional health instruction program that the investigator would like to focus attention.

Health facts are scientific facts not to be learned as such, but as the scientific basis for improved living. Healthful living based on accurate scientific information, that rules out quackery and superstition, is an important goal of health education.

According to Williams<sup>9</sup>, textbooks provide the best and most economical way of providing scientific content.

---

<sup>8</sup> Commission on Health, op. cit., p. 174.

<sup>9</sup> Jesse F. Williams and Clifford Brownell, The Administration of Health Education Applied (Philadelphia: W. B. Saunders Company, 1941), p. 187.

The acquiring of health information that influences attitudes and develops habits of health are essential objectives of health education. Health textbooks that present accurate scientific health facts are important tools to use in a functional health instruction program. The information in health texts is necessary and valuable in health instruction. They provide orderly and accurate instruction material which establishes a common core of content and common basis for reference for the pupils. "Health texts written by persons experienced in general education as well as in the special field have a distinct place in the health instruction program."<sup>10</sup>

A good health textbook will also stimulate pupil's interest, present an orderly and understandable arrangement of facts and present a common core of content for the class. It is a keystone to planned teaching and an effective scientific basis for intelligent self-direction in changing health behavior of pupils. From the teacher's standpoint a good textbook can be used as a frame of reference, as an aid in curriculum planning, as a supplement to a prepared guide to the essentials in health instruction, and as a tool when the mastery of certain information is the immediate objective.

---

<sup>10</sup>Clifford Brownell, Principles of Health Education Applied (New York: McGraw-Hill Book Company, Inc., 1949), p. 246.



Consider then health textbooks as tools to be used in making health functional in the lives of the pupils. Care should be taken in the selection and use of textbooks if they are to be contributing part of the health instruction program that gives understanding and practice in learning "to live most and serve the best."<sup>11</sup>

---

<sup>11</sup>Williams, loc. cit.

## CHAPTER II

### THE NATURE OF THE STUDY

The point of departure for this investigation was on the assumption that textbooks are important tools in the learning process. They are the chief sources of basic knowledge and indirect experience for the pupils. They supply this knowledge and these experiences in large well-organized amounts. Textbooks assist in guiding and enriching learning experiences. Direct experiences are important in the learning process but there is too much to appreciate, too many attitudes to acquire, too many judgments to be reached to expect teachers to provide learning experiences in all necessary knowledge. Textbooks help in the imparting of basic information necessary to change behavior patterns.

### THE PROBLEM

Statement of the problem. The problem was to determine whether health textbooks include content and material that make them valuable and important tools for a functional health instruction course. The area of this investigation was limited to sixteen health texts designed for use in the seventh and eighth grades.<sup>1</sup>

---

<sup>1</sup>Infra, Appendix A, pp. 75ff.

The problem was to determine whether these sixteen selected books have range and adequate coverage for the needs and interests of this age level. Whether they include: teaching aids that enrich the learning experiences, suggested activities of interest to the pupils, up-to-date information, adequate, stimulating, understandable illustrations, supplementary references; and whether the general make-up of the texts were appropriate for seventh and eighth grade pupils.

The purpose of the investigation. It was the purpose of this study (1) to develop criteria by which health textbooks would be evaluated on content, teaching aids, and format; (2) to evaluate sixteen health textbooks to determine whether content, suggested activities, teaching aids, and the physical features were suitable for health instruction in the seventh and eighth grades; (3) to make a comparative analysis as to which texts were most valuable as tools to learning in the seventh and eighth grades; and (4) to indicate the areas of shortages in the California State Health Series for seventh and eighth grades.

Importance of the study. Textbooks in health are valuable tools to a functional health instruction program insofar as they include information that gives learning experience in the health needs and interests of a particular group, provide a framework for learning, and a point of departure for teaching.



There are many teachers who are giving instruction in healthful living who have not been especially trained for health instruction work. It is important to determine whether there are textbooks available that can be used as sources of curriculum construction, give direction to the instructor, provide valuable teaching aids, and enrich the pupils' health experience.

#### THE LIMITATIONS OF THIS STUDY

There were two important limitations to this investigation. There was no attempt made to evaluate the accuracy of the scientific information in the health textbooks, and there was no evaluation as to whether the reading material of the texts was designed for the reading level of pupils in the seventh and eighth grades.

A study of the scientific accuracy of health texts has been investigated by a team of committees made up of competent persons in the field of health sponsored by the American Public Health Association.<sup>2</sup>

Determining the accuracy of the contents health texts is a problem for investigation by several competent people in the field of health. The investigation is of such

---

<sup>2</sup>H. F. Kilander, "The Accuracy of Health Content of School Textbooks," Report of the Committee on health content of textbooks, American Journal of Public Health, 43:128, Part 2, May, 1953.

magnitude it warrants separate treatment. Determining whether the reading material is of appropriate reading level for a particular age group is a study for experts in the field of reading readiness and abilities.

The investigation was further limited to objective evidence from authoritative sources to substantiate the analysis and comparisons that were made in the evaluation of the health texts. Items of a subjective nature were not included in the evaluation charts.

#### PROCEDURE

The first major phase of this study was to determine the health needs and interests of pupils in the seventh and eighth grades. This part of the investigation served as a basis for judging and evaluating the contents of the health textbooks.

To evaluate and analyze the selected textbooks three charts were developed to check as objectively as possible (1) the range and coverage of health topics, (2) aids in the use of the textbooks, and (3) the physical features of the texts.

A comparative chart was then developed to show the composite scores of each textbook and to make a comparative analysis of the texts.

## SOURCES OF DATA

The data was obtained by evaluating each of the selected sixteen textbooks on charts shown in Table IV Range and Coverage of Topics, page 41, Table V Aids in the Use of Texts, page 45, and Table VI Physical Features, page 47. A comparative analysis of the selected textbooks was made as shown in Table VII, page 55, and Table VIII, page 56.

## PREVIOUS RELATED STUDIES

There have not been too many studies made on evaluating or selecting textbooks, particularly in the field of health education. The most notable study on health textbooks was the Report of the Committee on Health Content of Textbooks of the American Public Health Association.<sup>3</sup> The purpose of this study was to determine the scientific accuracy of health information in selected health textbooks.

Twelve teams were organized throughout the country, made up of doctors, dentists, nurses, health educators, nutritionists, and teachers.

There were 146 reviewers, twenty-one health texts were reviewed, twenty-eight general science texts, and twelve biology books.

It was found that there were the greatest number of errors in the area of nutrition, first aid, and communicable

---

<sup>3</sup>Kilander, loc. cit.



disease. Errors of various types and degrees existed. Care is needed in reviewing health text to insure correct coverage. A health text must be frequently revised to keep up with scientific advances.

The January, 1952, issue of *The Phi Delta Kappan* was devoted to a symposium on textbooks, their use and their selection. In this issue were excerpts from a thesis for the M. S. Degree by Victor R. Durrance<sup>4</sup> in which he described how textbook selection was made in the 48 states.

Waterman<sup>5</sup> presented some valuable information on criteria for judging and evaluating textbooks. He pointed out the importance of making an analytical comparative study of textbooks and described four steps in the evaluating process: (1) set up criteria, (2) construct a score card and assign values to each item, (3) conduct comparative studies, objective in nature, and (4) rate textbooks on a score card showing the comparative values of each textbook.

In establishing criteria for evaluating teaching materials Bruner<sup>6</sup> outlined four major fields to consider. The

---

<sup>4</sup>Victor R. Durrance, "Public Textbook Selection in 48 States," *The Phi Delta Kappan*, 33:262-6, January, 1952.

<sup>5</sup>Ivan A. Waterman, "When You Choose a Textbook," *The Phi Delta Kappan*, 33:267-271, January, 1952.

<sup>6</sup>Herbert B. Bruner, "Criteria for Evaluating Teaching and Learning Materials and Practices." (New York: Bureau of Publications, Teachers College, Columbia University, 1941) pp. 1-14.

materials of learning should be based on sound principles of psychology and educational philosophy. The activities included in the texts should be challenging to the group, help them to proceed on their own initiative, be of interest to the pupils and satisfy a real need. The activities should have social value, reality, be varied, and be a means of self-appraisal. The content of the material should have authenticity, give adequate and appropriate treatment of the subject and show organization that develops immediate interests and satisfies needs of value. The plans for appraisal and evaluation of progress must include self-appraisal, a variety of techniques of evaluating work accomplished, have high validity, show areas of growth, and be interpreted in terms of the whole child.

The California State Department of Education<sup>7</sup> published an article on selecting American history and civic books in which were given criteria for textbook evaluation. The objectives of the course and the legal requirements should be taken into account in the selecting of a textbook. The text should be accurate and suitable to the reading level of the pupils. The study aids should facilitate learning. They should be numerous and include various activities. In selecting a textbook the format should be carefully evaluated.

---

<sup>7</sup> California State Department of Education, "Criteria for Textbook Evaluation," National Association of Secondary School Principals Bulletin, 35:10, October, 1951.

The Institute of American Textbook Publishers<sup>8</sup> gave briefly six tests in selecting a text. The six factors for consideration were: (1) date of copyright, (2) content and author intent, (3) consideration of the whole teaching unit, (4) the necessary insight on understanding to be gained by the pupils, (5) evaluating and discriminating opportunities, and (6) presentation of fair and unbiased information.

In developing criteria by which to evaluate texts for health instruction in the seventh and eighth grades the investigator used many of the procedures and suggestions as described in the review of previous related studies.

---

<sup>8</sup>The Institute of American Textbook Publishers, "Six Tests of Textbooks," American School Board Journal, 122: 25, June, 1951.



## CHAPTER III

### HEALTH NEEDS OF IMPORTANCE FOR EVALUATION OF HEALTH TEXTBOOKS

To have effective health instruction the content of the learning experience must be centered around the needs of the pupils. The health problems or needs as indicated by authoritative sources as the health needs of the nation, state and locality, the health needs of a particular age group and the health needs as future adults in a democratic society must be determined.

#### DETERMINING HEALTH NEEDS

The first major phase consisted of an analysis of suitable sources in order to obtain a valid list of health needs or problems important in evaluating health textbooks for use in health instruction.<sup>1</sup>

The first authoritative source of health needs consisted of an analysis of the health problems as presented in ten books written by recognized leaders in the field of health education and curriculum construction.

The second source of authoritative statements on the health needs of pupils was an analysis of six Health Guides developed for use in health instruction programs. The material

---

<sup>1</sup>Infra, Appendix B, pp. 78f.

on the health needs of pupils found in these guides represented research study done by committees of teachers and health consultants.

The third authoritative source of health needs was an analysis of recent magazine articles and research done by health curriculum construction committees on the health problems of pupils. Included in this third source are the findings of the Health Curriculum Workshop Committee of the Stockton Unified School District on the needs of pupils in the secondary schools as determined by research study, teachers' opinions and community health agencies.

A detailed analysis, Table I page 18, was made by listing all health needs discussed in the twenty-one sources used. A check was made on the frequency that each need was mentioned and an x was placed opposite the topic and under the number representing the source. If the source indicated the topic was a particular need for seventh and eighth grade health instruction the x was circled (O). The number of times each need was discussed in each source was counted and the total listed in the column headed Frequency. The number of times a health need was indicated for the seventh and eighth grade was determined and listed under the heading 7th and 8th. All health needs were listed in rank order of importance.

According to the data obtained from the twenty-one sources analyzed it was determined that the following



TABLE I

## HEALTH NEEDS OF SIGNIFICANCE FOR HEALTH INSTRUCTION

| HEALTH NEEDS                   |    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    | Frequency |    |
|--------------------------------|----|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|-----------|----|
|                                | *1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 7th-8th   |    |
| 1. Atomic Warfare              |    |   |   |   |   |   |   |   |   |    | x  |    |    |    |    |    |    | x  |    |    |    | 4         | 2  |
| 2. Community Health            |    |   |   | x | x | x | x |   | x |    |    |    |    | x  |    | x  | x  | x  |    |    |    | 20        | 11 |
| 3. Common Ailments             |    |   |   |   |   |   | x |   |   |    |    |    |    |    |    |    |    |    |    |    |    | 5         | 4  |
| 4. Communicable Disease        |    |   |   | x | x | x | x | x | x |    | x  |    |    |    |    | x  | x  | x  | x  |    |    | 20        | 8  |
| 5. Chronic Disease             | x  |   |   | x |   |   | x | x |   |    |    | x  |    | x  |    | x  | x  | x  | x  |    |    | 13        | 2  |
| 6. Exercise, Rest, Fatigue     |    |   |   | x | x | x | x | x | x |    |    |    |    | x  |    |    |    | x  |    |    |    | 17        | 9  |
| 7. Physical Environment        |    |   |   | x | x | x | x |   | x |    |    |    |    | x  |    |    |    | x  |    |    |    | 13        | 5  |
| 8. Family Health               | x  |   |   | x | x | x |   |   | x |    | x  |    |    | x  |    |    |    | x  | x  |    |    | 15        | 6  |
| 9. First Aid, Home Nursing     |    |   |   | x |   |   |   |   | x | x  | x  | x  |    | x  |    | x  | x  | x  |    |    |    | 14        | 5  |
| 10. Physical Fitness           | x  |   |   |   |   | x | x |   |   |    |    |    |    |    |    | x  |    |    | x  |    |    | 11        | 6  |
| 11. Habit Forming Substances   | x  |   |   |   |   | x | x | x | x | x  |    |    |    | x  |    | x  |    | x  |    |    |    | 16        | 7  |
| 12. Heredity and Eugenics      |    |   |   |   |   |   |   |   |   | x  |    |    |    |    |    | x  |    | x  |    |    |    | 8         | 4  |
| 13. International Health       |    |   |   |   |   |   |   |   |   |    | x  |    |    |    |    |    |    | x  |    |    |    | 2         | 0  |
| 14. Mental Health              |    |   |   | x | x | x | x | x | x |    |    |    |    |    |    | x  |    | x  | x  |    |    | 21        | 14 |
| 15. Nutrition and Health       |    |   |   | x | x | x | x | x | x |    |    |    |    |    |    | x  |    | x  | x  |    |    | 20        | 13 |
| 16. Personal Appearance        |    |   |   | x | x | x | x | x | x |    |    |    |    |    |    |    |    | x  |    |    |    | 17        | 11 |
| 17. Recreation                 |    |   |   |   |   |   | x | x |   |    |    |    |    |    |    | x  |    |    |    |    |    | 12        | 8  |
| 18. Safety                     |    |   |   | x | x | x |   |   |   |    |    |    |    |    |    | x  | x  | x  | x  |    |    | 16        | 9  |
| 19. Growing Into Maturity      |    |   |   | x | x | x |   |   | x |    |    |    |    |    |    |    |    | x  | x  |    |    | 14        | 8  |
| 20. Scientific Health Services |    |   |   | x | x | x | x |   | x |    |    |    |    |    |    |    |    | x  |    |    |    | 12        | 5  |
| 21. Care of Special Organs     | x  |   |   | x | x | x | x |   |   |    |    |    |    |    |    |    |    | x  | x  |    |    | 16        | 9  |
| 22. Structure and Function     | x  |   |   | x | x | x | x |   |   | x  |    |    |    |    |    | x  |    | x  | x  |    |    | 15        | 6  |
| 23. Trends In Health           |    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | x  |    |    |    | 2         | 0  |
| 24. Meaning Of Health          |    |   |   |   |   |   | x |   |   | x  |    |    |    |    |    |    |    |    |    |    |    | 6         | 4  |
| 25. Vocations In Health        |    |   |   |   |   |   |   |   |   |    |    |    |    |    |    | x  |    |    |    |    |    | 1         | 0  |
| 26. Dental Health              |    |   | x |   | x |   |   | x |   |    |    |    |    |    |    | x  |    | x  |    |    |    | 12        | 7  |
| 27. Health A Social Problem    |    |   |   |   |   |   |   |   |   |    |    |    |    |    |    | x  |    | x  |    |    |    | 4         | 2  |
| 28. Occupational Health        |    |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    | x  |    |    |    | 3         | 2  |

\*The numbers at top of table refer to the twenty-one sources as listed in Appendix B.



problems need emphasis in modern functional instruction course and are significant in evaluating the content of health textbooks:

1. Mental and Emotional Health. Basic psychology, understanding self, personality development, boy and girl relationships, earning independence, and mental health and disease.
2. Community Health. The individual's responsibility for group health, health service available in the community, safeguards to community, health district activities, and leading community health problems.
3. Communicable Disease. Infection and immunity, insects and disease, control and prevention, superstitions, the conquest of disease control, and leading community disease problems.
4. Nutrition and Health. Eating habits, selection of foods, balanced diet, weight control, nutrition and dental health, and superstitions about eating.
5. Exercise, Fatigue, and Rest. Exercise and body mechanics, fatigue as a health problem, importance of rest and sleep.
6. Personal Appearance. Posture, clothing, cleanliness, good grooming, caring for skin, hair, and nails, relationship to feeling of well being, and individual responsibility for appearance.

7. Habit Forming Substances. Effects of alcohol, tobacco, narcotics, coffee, tea, and carbonated beverages.
8. Safety. Pedestrian, safety in the home, bicycle safety, traffic, water, accident prevention, accidents as a national problem, and fire prevention.
9. The Care of Special Organs. Teeth, eyes, ears, nose and throat, speech disorders, sinuses, tonsils, and adenoids.
10. Family Health. Preparation for marriage, infant care, pre-natal care, feeding the family, family relationship, pregnancy and childbirth, divorce, consumer education, and family health.
11. Structure and Function of the Body. Growth, bones, cells, tissues, circulations, elimination, health, and body functions.
12. First Aid - Home Nursing. Treatment of minor injuries, prevention of injuries, first aid at accidents, and care of the sick in the home.
13. Growing Into Maturity. Growing up, endocrine glands, psychological and physiological changes, and sex education.
14. Physical Environment. Healthful living at school and home, sanitation, fresh air and sunshine, effects of elements on health, lighting and ventilation, and adjustment to environment.

15. Chronic Diseases. Health problems of degenerative diseases, leading causes of illness due to chronic diseases, and medical advancement in care of disease.
16. Recreation and Relaxation. Value of recreation, hobbies, how to relax.
17. Scientific Health Services. Health services available in community, health agencies, hospitals and clinics, fads, fallacies and quackery.
18. Dental Health. Prevalence of dental health problems, good dental health practices, control and prevention of dental health problems.
19. Physical Fitness. Personal health status, health maintenance and improvement, importance of keeping physically fit.
20. Heredity and Eugenics. Why people differ.
21. Meaning of Health.
22. Common Ailments. Causes of absenteeism from school and work, prevention and care. Indigestion, constipation, headaches, etc.
23. Atomic Warfare. Health hazards.
24. Health as a Social Problem. Major health problems, housing, health and income, migrant workers and conservation program and health.
25. Occupational Health. Health problems of occupations, child labor, occupational hazards, and women in industry.



26. International Health. World health problems.
27. Trends in Health. National health bills, research in health, science foundations, socialized medicine and the American Medical Association.
28. Vocations in Health. Nursing, medical profession technicians, etc.

The above problems are listed in rank order according to frequency score.

These particular categories were selected because they were more inclusive and were used most often by sources investigated.

Some problems were mentioned as separate units of instruction but were checked under one of the categories established, for example, posture was indicated by some sources as a separate unit but was checked under the category of Personal Appearance.

Dental Health was mentioned by several sources as a distinct health problem of the nation. A separate category was made for this problem and checked when the source indicated it was an important health problem to be treated as a separate unit of instruction.

#### DETERMINING HEALTH NEEDS OF SEVENTH AND EIGHTH GRADE PUPILS

The second major phase was to determine which of the health problems listed as needs had particular significance

for textbooks to be used in the health instruction in the seventh and eighth grades.

In analyzing the health problems according to authoritative sources particular attention was noted of references to needs at the seventh and eighth grade level. Fourteen out of the twenty-one sources analyzed indicated seventh and eighth grade health problems or needs. The check or x was circled if the source indicated that it was a particular health need for the seventh and eighth grade. See Table I page 18.

In some instance a particular group of problems or needs were indicated as the course of instruction for the seventh and eighth grade because they were a part of the total health instruction program from the primary through the secondary grades. According to the investigation certain units were covered at certain grade levels to insure that pupils would have instruction and learning experiences in all problems of health during their school life. The problems included in these courses were not considered by many sources as the most important for seventh and eighth grade pupils. However, considering this limitation, the investigator used all indications of all health problems for seventh and eighth grade pupils as a basis for selecting health problems of importance for this grade level and of significance in evaluating contents of textbooks designed for seventh and eighth grade health instruction courses.

According to the data obtained from the fourteen sources that indicated needs of seventh and eighth grade the following problems need emphasis:

1. Mental and Emotional Health
2. Nutrition and Health
3. Community Health
4. Personal Appearance
5. Exercise, Rest and Fatigue
6. Safety
7. Care of Special Organs
8. Growing Into Maturity
9. Communicable Disease
10. Recreation and Relaxation
11. Habit Forming Substances
12. Dental Health
13. Structure and Function of the Body
14. Family Health
15. Physical Fitness
16. Physical Environment
17. Scientific Health Services
18. Common Ailments
19. First Aid and Home Nursing
20. Heredity and Eugenics
21. Meaning of Health
22. Atomic Warfare
23. Chronic Disease



24. Health as a Social Problem

25. Occupational Disease

These health topics indicating health needs are arranged in order of their importance according to frequency in which they were discussed in twenty-one sources. No attempt was made to eliminate any topic that was on the first list of health problems unless there was no score for the topic. Three were eliminated for having a score of zero.

This list of health needs was compared to what is known to be the health interests and developmental characteristics of seventh and eighth grade pupils to determine what health problems are of importance and should be included in textbooks designed for health instruction in the seventh and eighth grade.



## CHAPTER IV

### SIGNIFICANT HEALTH INTERESTS FOR TEXTBOOK SELECTION

The incentive to learn is dependent upon the interest of the learner. In health instruction cognizance must be made of this element of the learning process when improved health behavior is the goal. If the learning experiences are in keeping with the maturity level, developmental urges and motivating forces of a particular group, learning takes place.

In the evaluation of textbooks for a certain age group it is of importance to determine first, the developmental characteristics that influence the interests of this particular group and secondly, whether the textbooks recognize these motivating forces by including those learning experiences that are not only needs of the pupils but are also interest drives. The physical make-up of a textbook is a factor to consider in relation to interests of a particular group, as are the suggested activities, supplementary materials, and teaching aids.

#### DEVELOPMENTAL CHARACTERISTICS OF SEVENTH AND EIGHTH GRADE PUPILS

The changes in the growth pattern and developmental characteristics that pupils of a particular age level are

experiencing greatly affects their interests and motivates learning. To determine what are the health interests of pupils of the seventh and eighth grade it is of importance to see what developmental changes are taking place at this age level.

The first major phase was to study sources of information concerning the developmental characteristics of pupils of this age. An important source used in this investigation was found in Health Interests of Children, published by the Denver Public Schools.<sup>1</sup> In this study a summary was made of the physical, mental, emotional, and social developmental characteristics which have implications for health instruction. Materials were gathered for this summary through a survey of recent child growth and development studies.

It was found in this study that in general pupils in the seventh and eighth grades have a variety and instability of interests, show aggressive individualistic behavior, display the appearance of resistance, have frequent crushes, display hero worship, show anti-social behavior at early period, display emotional instability, begin to assume some responsibility for maintaining health, desire to become skillful in athletics, girls show a growing social maturity, both

---

<sup>1</sup> Denver Public Schools, Health Interests of Children (Denver, Colorado: Denver Public Schools, 1947), p. 121.

boys and girls display an awareness of self and have an attitude of indifference toward their environment.

DETERMINING HEALTH INTERESTS AS INFLUENCED  
BY DEVELOPMENTAL CHARACTERISTICS

Girls and boys of this age (11-14) are timid in the presence of the opposite sex, are searching for a balance between freedom and security, seek the approval of peers, desire to be popular, are over conscious of social approval, are critical of their parents, and want to be identified with a group.

In the field of mental and emotional health the Denver Study indicated that there is great interest by pupils in developing self confidence and poise, gaining independence, getting along with the group, and being accepted by the group.

Healthy young adolescents have enormous appetites. They do not always choose their food wisely but they are interested in eating. Knowing of the basic food requirements and understanding the effect of food on the body is of some interest to these young people.

There is very little inherent interest in community health. Children of this age are most likely to be interested in their own health problems, groups, cliques, and out-of-school clubs.



Personal appearance is of growing importance at this age and these young adolescents are increasingly taking individual responsibility for their own appearance. They are interested in the care of the skin, selecting and care of their clothes, points of good grooming, and posture in relation to appearance.

There is an interest in team games and sports and desire to become skillful in athletics. Fatigue becomes a problem at this age and care should be taken that over-fatigue does not occur in the pursuit of the interest in sports.

Pupils in the seventh and eighth grades appear to have an interest in the care of their eyes and in the care of the teeth in relation to personal appearance.

Growing into maturity and the physiological changes are of great interest to these young people. They note the rapid increase in growth and are interested in this growth phenomenon. The development of the sex organs and secondary sex characteristics are of vital interest to them. The emotional adjustments accompanying this growth period are of concern to them. Boy and girl relationships are of great interest to them.

Interest in disease is not very great at this age level probably because early adolescents are relatively free



from acute illnesses and communicable disease.<sup>2</sup> However, the Denver Study reports that pupils of this age are interested in gaining scientific information about the cause and prevention of disease, preventing colds, maintaining body resistance to disease, and studying the conquest of disease.

In a recent sampling made of the health interests of pupils in the secondary schools of the Stockton Unified School District it was found that seventh and eighth grade pupils were interested<sup>3</sup> in how germs were transmitted, facts about poliomyelitis and tuberculosis, and in new discoveries in medicine in relation to disease cure and control.

There is a growing awareness of these young people on the importance of relaxing which manifests itself in their interest in hobbies and recreational activities outside of school hours.

Due to the fact that they are experiencing rapid increase in growth they are interested in those health habits that affect physical fitness, strength, and stamina. The scientific facts about smoking, the use of alcohol, drinking, carbonated beverages, tea and coffee are of interest to them.

---

<sup>2</sup>Ruth E. Grout, Health Teaching in Schools (Philadelphia: W. B. Saunders Company, 1948), p. 161.

<sup>3</sup>Infra, Table II, pp. 35ff.

The Denver Study does not indicate any particular interest in dental health but pupils of the seventh and eighth grade in the Stockton schools indicated a definite interest in the problems of tooth decay.<sup>4</sup>

These young people show very little interest in the structure and the function of the body, only so far as this information is related to other areas of health such as; care of injuries, growing up, personal appearance, etc.

In relation to family living young adolescents are interested in how to maintain a balance between freedom and security--how to gain independence but at the same time how to make adjustments to family so that they have the security of the home.

Physical fitness is of great interest to the boys. They are especially interested in how to build muscles and how to measure up to the other boys of their age. Keeping fit seems to be a way of taking part in physical activities and being accepted as a member of a group.

The physical environment had very little interest to these pupils. At times they seem oblivious to their environment.

Neither are they too much concerned with scientific health services available in the community. They do show an interest in fads, fallacies and fancies in medicine.

---

<sup>4</sup>

Infra, Table II, p. 35.

Since their illnesses are not of a serious nature they are more interested in the relief of common ailments such as; sunburn, headaches, blisters, and upset stomachs. First aid for minor injuries are of interest because they sustain many minor injuries.

In the area of heredity and eugenics youngsters of this age show an interest in hereditary traits such as the color of their eyes, and why they are tall or short.

According to the study of health interests of pupils in the Stockton Unified School District many pupils were interested in what to do in case of atomic attack and how to prevent and treat injuries from atomic blasts.<sup>5</sup>

The only chronic disease in which pupils of this age show an interest is cancer--especially cancer in teen agers.

Health as a social problem has very little interest to them. They are too concerned with their individual physical and emotional adjustments.

As they study vocations in their social study classes some may become interested in various careers in the field of health and medicine.

---

<sup>5</sup>Infra, Table II, p. 38.



LEARNING EXPERIENCES FOR HEALTH INSTRUCTION  
IN THE SEVENTH AND EIGHTH GRADES

The decision as to what learning experiences should be included in the health instruction for seventh and eighth grades cannot be left entirely up to the pupils' expressions of their health interests. They may be unaware of future health needs, health needs of the community, state, and nation, or of even current personal health needs. A selective process considering both the needs and interests should be employed.

In comparing the significant health needs as determined by investigation in the previous chapter with the investigation of known health interests of pupils in the seventh and eighth grades, learning experiences that satisfy present and future health needs and have timeliness and motivation were selected as indicated in Table II page 35 and Table III page 40.

According to investigation and study of authoritative sources<sup>6</sup> some phases of the following major health areas are important learning experiences to be included in seventh and eighth grade health instruction:

1. Mental and Emotional Health
2. Nutrition and Health
3. Community Health
4. Personal Appearance

---

<sup>6</sup> Infra, Table II, pp. 35 and Table III, p. 40

5. Exercise, Rest and Fatigue
6. Safety
7. Care of Special Organs
8. Growing Into Maturity
9. Communicable Disease
10. Recreation and Relaxation
11. Habit Forming Substances
12. Dental Health
13. Family Health
14. Physical Fitness
15. Common Ailments
16. Scientific Health Services
17. First Aid and Home Nursing
18. Meaning of Health
19. Atomic Warfare
20. Vocations in Health

The areas eliminated from the list of indicated health needs that were not of great interest to seventh and eighth grade pupils were: Structure and Function of the Body (this need could be part of the learning experience in relationship to other areas), Physical Environment, Heredity and Eugenics, Chronic Disease, and Occupational Disease.

Vocations in Health was added because of an emerging interest in the selection of a vocation of this age level.

TABLE II

HEALTH INTEREST CHECK LIST  
STOCKTON UNIFIED SCHOOLS  
SEVENTH AND EIGHTH GRADE  
FREQUENCY OF CHECKS AND RANK ORDER OF QUESTIONS

| <u>**Questions</u>   | <u>7th<br/>(165)</u> | <u>Rank<br/>Order</u> | <u>8th<br/>(207)</u> | <u>Rank<br/>Order</u> |
|--|----------------------|-----------------------|----------------------|-----------------------|
| <u>APPEARANCE AND PERSONAL HEALTH</u>  |                      |                       |                      |                       |
| 1. What causes body odor?  | 85                   | 35                    | 69                   | 54                    |
| 2. Does the use of deodorants cause serious skin irritation?                     | 70                   | 65                    | 56                   | 64                    |
| 3. What substances needed by the body are lost through perspiration?             | 70                   | 65                    | 48                   | 81.5                  |
| 4. Are pimples caused by poor digestion?   | *105                 | *7.5                  | *98                  | *4                    |
| 5. How can one break a habit like biting the finger nails?                       | 75                   | 48.5                  | 71                   | 30.5                  |
| 6. Can the skin absorb such things as vanishing cream, alcohol, etc?             | 61                   | 83.5                  | 47                   | 83                    |
| 7. What is the safest way to remove unwanted hair?                               | 62                   | 80.5                  | 69                   | 54                    |
| 8. Is a coat of tan healthful?   | 84                   | 35                    | 64                   | 46.5                  |
| 9. What is the best way to take care of the skin and scalp?                      | *100                 | *13                   | 65                   | 43                    |
| 10. Is chlorophyll of any value in preventing odors?                             | 71                   | 60                    | 52                   | 70.5                  |
| <u>DENTAL HEALTH</u>   |                      |                       |                      |                       |
| 1. What are the problems of tooth decay?   | *95                  | *23                   | *92                  | *9                    |
| <u>FOOD AND NUTRITION</u>  |                      |                       |                      |                       |
| 1. What kind of dangerous parasites or bacteria are most commonly found in food? | 90                   | 30.5                  | 62                   | 52                    |
| 2. Should adults add to the regular diet with cod liver oil or vitamin capsules? | 43                   | 105                   | 27                   | 109                   |
| 3. Is the skipping of meals harmful to one's health?                             | 92                   | 29                    | 71                   | 30.5                  |

\*Indicates the highest twenty-five questions of interests.

\*\*Instructions were to check each question of interest, not to answer the question.



| Questions   | 7th  | Rank<br>Order | 8th | Rank<br>Order |
|---|------|---------------|-----|---------------|
| <b>FOOD AND NUTRITION (Contd.)</b>  |      |               |     |               |
| 4. Will drinking coffee before bedtime keep a person awake?   | 62   | 80.5          | 62  | 52            |
| 5. Are coffee, tea, cocoa and cola drinks harmful to our health?  | *103 | *9.5          | *91 | *10           |
| 6. What does "pasteurization" do to milk?   | 59   | 87            | 38  | 106.5         |
| 7. Does one get enough vitamins in the ordinary diet?   | 58   | 89.5          | 44  | 90            |
| 8. Is overweight or underweight hereditary?   | 93   | 26.5          | 70  | 33            |
| 9. What types of food should an athlete eat?  | 78   | 43            | 55  | 65.5          |
| 10. Is it necessary to eat sea food occasionally to insure that a sufficient amount of iodine is taken into the body? | 73   | 56            | 44  | 90            |
| 11. What is a balanced diet?  | 51   | 98            | 42  | 94.5          |
| 12. Is buttermilk good for putting on weight?   | 39   | 107           | 40  | 90            |
| 13. Why do most people weigh more when they are 40 than when they are 25?   | 65   | 76.5          | 58  | 60.3          |
| 14. What food deficiency diseases are most likely to result from diet restrictions imposed upon the people?           | 50   | 99.5          | 37  | 108           |
| 15. What is malnutrition and what is its effect on our health?  | 46   | 104           | 44  | 90            |
| 16. Is it true that certain vegetables or fish should not be eaten at the same meal with milk?                        | 81   | 38            | 58  | 60.3          |
| 17. Is fish a brain food?   | 74   | 52            | 46  | 85            |
| 18. What are the dangers of using drugs for reducing?   | 93   | 26.5          | 65  | 43            |
| 19. Is there any danger of allowing food to stay in an open can several days?   | 70   | 65            | 51  | 75.5          |
| 20. Should one eat fried foods?   | 63   | 78            | 46  | 85            |
| 21. How much can one rely upon the information given in food advertising on the labels of food products?              | 52   | 96            | 42  | 94.5          |
| 22. Is there any danger of becoming poisoned by eating food sprayed with arsenic?                                     | 93   | 26.5          | 64  | 46.5          |
| 23. How does bicarbonate of soda affect digestion?  | 76   | 46            | 41  | 99            |

| Questions   | 7th  | Rank<br>Order | 8th  | Rank<br>Order |
|---|------|---------------|------|---------------|
| <u>FOOD AND NUTRITION (Contd.)</u>  |      |               |      |               |
| 24. Is constipation dangerous if a person is healthy in other respects?         | 55   | 92.5          | 42   | 94.5          |
| <u>MENTAL AND EMOTIONAL HEALTH</u>  |      |               |      |               |
| 1. What are some of the changes that take place in teen age youth?              | *121 | *1            | *100 | *2            |
| 2. What are the causes of mental illness?                                       | *100 | *13           | 66   | 40.5          |
| 3. How can a person get along with his parents?                                 | *98  | *18           | 75   | 25.5          |
| 4. How can we make other people like us?  | *105 | *7.5          | *77  | *22.5         |
| 5. How does mental health affect physical health and vice versa?                | 71   | 60            | 41   | 99            |
| 6. What influence can parents have on children?                                 | 89   | 32            | 53   | 68            |
| 7. How can bashfulness be overcome?   | 84   | 35            | 58   | 60.3          |
| 8. What adjustments to the opposite sex are necessary to happiness?             | *101 | *11           | *79  | *18           |
| <u>GROUP AND COMMUNITY HEALTH</u>   |      |               |      |               |
| 1. Why is the number of military rejectees for physical defects so high?        | 59   | 87            | 40   | 104           |
| 2. What are the duties of the public health department?                         | 62   | 80.5          | 38   | 106.5         |
| 3. What are the pros and cons of fluoridation?                                  | 74   | 52            | 45   | 87            |
| 4. Is there a simple and safe way for a camper to make drinking water pure?     | 76   | 46            | 51   | 75.5          |
| 5. Can one use a public drinking fountain with safety?                          | 83   | 37            | 57   | 63            |
| 6. How do cities dispose of sewage?   | 76   | 46            | 42   | 94.5          |
| 7. How is the problem of waste disposal related to the control of fly breeding? | 69   | 69.5          | 41   | 99            |
| 8. What is the mosquito abatement program?                                      | 75   | 48.5          | 59   | 55.5          |
| 9. Could smog be a problem in Stockton?   | 52   | 96            | *87  | *11           |
| 10. Is it harmful to be a blood donor?  | 70   | 65            | 58   | 59            |
| <u>EXERCISE, FATIGUE AND REST</u>   |      |               |      |               |
| 1. Are people who take a great deal of exercise likely to die young?            | *95  | *23           | *99  | *3            |



| Questions | 7th | Rank<br>Order | 8th | Rank<br>Order |
|-----------|-----|---------------|-----|---------------|
|-----------|-----|---------------|-----|---------------|

EXERCISE, FATIGUE AND REST (Contd.)

- |  |      |    |      |      |
|--|------|----|------|------|
| 2. Does strenuous exercise strain the heart? | 89   | 33 | *94  | *6.5 |
| 3. How much sleep should a person get?       | *106 | *6 | *101 | *1.  |

INFECTION AND IMMUNITY

- |   |      |       |     |       |
|---|------|-------|-----|-------|
| 1. Can some people carry disease germs and at the same time remain healthy?             | *98  | *18   | *85 | *14.5 |
| 2. What should we know about polio?   | *108 | *5    | *93 | *8    |
| 3. What should we know about tuberculosis?  | *99  | *15.3 | *78 | *20.5 |
| 4. Does peat dust cause tuberculosis?   | *103 | *9.5  | *82 | *17   |
| 5. Why is the Wasserman test required of those intending to get married?                | 71   | 60    | 70  | 33    |
| 6. How does it happen that colds often lead to more serious diseases?                   | 84   | 35    | 73  | 29    |
| 7. What happens when one is inoculated or vaccinated against a disease?                 | 73   | 56    | 52  | 70.5  |
| 8. How successful has gamma globulin been in the treatment of polio?                    | 79   | 41    | 58  | 60.3  |
| 9. Will violet ray and sun lamps build up one's resistance to colds and other diseases? | 58   | 89.5  | 63  | 49.5  |
| 10. Are the advertised throat antiseptics and cold remedies of any value?               | 69   | 69.5  | 51  | 75.5  |
| 11. What are antibiotics and are they useful?   | 50   | 99.5  | 41  | 99    |
| 12. How can "athlete's foot" be avoided?  | 90   | 30.5  | *85 | *14.5 |
| 13. What is the best way to prevent colds?  | 79   | 41    | 62  | 52    |
| 14. Will exposure to strong sunlight kill harmful bacteria?                             | 74   | 52    | 51  | 75.5  |
| 15. Do throat sprays and lozenges have any protective effect against "flu" and colds?   | 72   | 58    | 59  | 55.5  |
| 16. Are cold shots of any value in the prevention of colds?                             | 74   | 52    | 53  | 68    |

SAFETY AND FIRST AID

- |   |      |       |    |      |
|---|------|-------|----|------|
| 1. What is the best way to treat a severe bruise?                               | *111 | *4    | 75 | 25.5 |
| 2. What is the effect of massaging on the muscles?                              | *98  | *18   | 67 | 39   |
| 3. Are there any rules which hikers should follow in traffic on a country road? | 66   | 74.5  | 50 | 78.5 |
| 4. How can fainting be avoided?   | *97  | *20.5 | 65 | 43   |



| Questions  | 7th  | Rank<br>Order | 8th | Rank<br>Order |
|--|------|---------------|-----|---------------|
| <u>SAFETY AND FIRST AID (Contd.)</u>   |      |               |     |               |
| 5. How can one stop arterial bleeding?   | *100 | *13           | *76 | *24           |
| 6. Should one wait after a meal before going swimming?   | 62   | 80.5          | 60  | 54            |
| 7. What safety measures should be taken in and around water?   | 80   | 39            | 58  | 51            |
| 8. What is the best protection in case of an atomic attack?  | *116 | *2            | *95 | *5            |
| 9. How are atomic blast injuries treated?  | *114 | *3            | *85 | *14.5         |
| <u>HEALTH AND PHYSICAL ENVIRONMENT</u>   |      |               |     |               |
| 1. Are there conditions when the exhaust from automobiles on the streets of crowded cities is dangerous to health? | 70   | 60            | 52  | 70.5          |
| 2. Is it healthful to have the windows wide open when sleeping no matter what the temperature outside?             | 86   | 33            | *80 | *18           |
| 3. What is the proper humidity and temperature for a schoolroom or home?   | 65   | 76.5          | 53  | 68            |
| 4. Does smoke from chimneys influence health?  | 70   | 65            | 63  | 49.5          |
| <u>CHRONIC ILLNESS</u>   |      |               |     |               |
| 1. What causes hardening of the arteries?  | 59   | 87            | 63  | 49.5          |
| 2. How can one prevent heart disease?  | 73   | 56            | 74  | 27.5          |
| ✓ 3. What relation has diet and the use of salt to high blood pressure?  | 68   | 71.5          | 65  | 43            |
| 4. Does cancer strike teen-agers?  | *97  | *20.5         | *94 | *6.5          |
| <u>INTERNATIONAL HEALTH</u>  |      |               |     |               |
| ✓ 1. What are the functions of the world health organization?  | 42   | 106           | 44  | 90            |
| 2. What has been the role of rats in the history of the world?   | 48   | 102           | 50  | 78.5          |
| 3. Can bacteria warfare be successful?   | 60   | 85            | 48  | 81.5          |
| <u>HABIT FORMING SUBSTANCES</u>  |      |               |     |               |
| 1. Does smoking affect one's health?   | *99  | *15.5         | *86 | *12           |
| 2. Should advertising slogans about tobacco, alcohol and other products be accepted in total?                      | 66   | 74.5          | 49  | 80            |
| 3. What is the relationship between the use of alcohol and drugs to accident and crime?                            | 93   | 26.5          | 70  | 33            |

| Questions   | 7th | Rank<br>Order | 8th | Rank<br>Order |
|---|-----|---------------|-----|---------------|
| <u>SCIENTIFIC HEALTH SERVICES</u>   |     |               |     |               |
| 1. How should one select a physician and a dentist?   | *95 | *23           | 68  | 37.5          |
| 2. Of what value is the Federal Food and Drug Act in controlling the advertisement of patent medicines? | 79  | 41            | 47  | 83            |
| 3. How can a person distinguish between beneficial patent medicines and useless and harmful ones?       | 67  | 73            | 46  | 85            |
| 4. What are the affects of various kinds of health pills on your body?                                  | 55  | 92.5          | 55  | 65.5          |
| 5. What is health insurance?  | 49  | 101           | 44  | 90            |
| <u>HEREDITY AND EUGENICS</u>  |     |               |     |               |
| 1. What physical and mental defects or diseases are hereditary?   | 56  | 91            | 64  | 46.5          |
| <u>OTHERS</u>   |     |               |     |               |
| 1. What are the facts about hormone preparations?   | 47  | 103           | 40  | 104           |
| 2. Does poor health affect the mind or vice versa?  | 67  | 73            | 63  | 46.5          |
| 3. What is an allergy, and what are some of the more common allergies?                                  | 53  | 94            | 52  | 44            |
| 4. Where would you be able to get a copy of your birth certificate?                                     | 70  | 65            | 66  | 40.5          |
| 5. Why do schools give each pupil a health examination?   | 61  | 83.5          | 68  | 37.5          |
| 6. What are some of the hazards in industry and how can they be avoided?                                | 52  | 96            | 41  | 99            |
| 7. What are the laws governing child labor, and why are such laws necessary?                            | 68  | 71.5          | 74  | 27.5          |
| 8. What new discoveries in medicine are helping mankind?  | 77  | 44            | *77 | *22.5         |

## CHAPTER V

### ORGANIZATION OF THE INVESTIGATION

To determine the range of topics and the degree of emphasis on each topic in the sixteen selected textbooks the learning experiences as listed in Chapter III were used.<sup>1</sup> These learning experiences represent carefully selected content for health texts based on present and future needs and interests of seventh and eighth grade pupils. They are keyed to these pupils' maturity level and show progressive opening of doors to expanding areas of understanding in health.

Table IV indicates the evaluation of each of the textbooks on the range and extent of emphasis on each of the twenty health areas selected as important learning experiences for pupils of the seventh and eighth grades. The number of pages on each topic in each text was counted. One point was given for every five pages or fraction thereof. The average score for each topic was determined by dividing the total score for each topic by the number of books that included the topic.

It was then determined how many topics in each book did not have the computed average score. This was done by checking those topics in each book that had a below average

---

<sup>1</sup>Supra., pp. 22ff.



TABLE IV  
RANGE AND COVERAGE OF TOPICS

| TOPICS                          | *1 | 2  | 3  | 4  | 5  | 6  | 7 | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | Total No. of<br>Score | Average<br>Texts | Score |
|---------------------------------|----|----|----|----|----|----|---|----|----|----|----|----|----|----|----|----|-----------------------|------------------|-------|
| 1. Atomic Warfare               |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    | 0                     | 0                |       |
| 2. Care of Special Organs       | 4  |    | 6  |    | 3  |    | 5 | 1  |    |    |    | 2  | 2  | 5  | 3  |    | 31                    | 9                | 3.44  |
| 3. Common Ailments              | 1  | 1  |    |    |    |    | 1 |    |    | 1  |    | 1  |    | 1  | 1  |    | 7                     | 7                | 1.    |
| 4. Communicable Disease         | 2  | 10 | 7  | 9  | 7  | 8  | 6 | 5  | 5  | 4  | 5  | 7  | 1  | 3  | 14 | 9  | 102                   | 16               | 6.37  |
| 5. Community Health             |    | 20 | 3  |    |    | 6  |   |    |    |    | 17 | 6  |    | 1  | 5  | 8  | 66                    | 8                | 8.25  |
| 6. Dental Health                | 1  |    | 2  | 2  | 2  |    | 3 | 2  | 2  | 1  |    | 1  | 1  | 1  |    | 4  | 22                    | 11               | 2.    |
| 7. Exercise, Rest and Fatigue   | 1  |    | 2  | 6  | 1  | 1  | 3 | 1  | 6  | 8  | 4  | 1  | 1  | 3  |    |    | 38                    | 13               | 2.92  |
| 8. Family Health                |    | 2  |    | 1  |    |    | 1 |    |    |    |    | 9  | 9  | 1  |    |    | 23                    | 6                | 3.83  |
| 9. First Aid and Home Nursing   |    | 7  | 2  |    | 3  | 2  | 6 |    | 35 | 1  | 5  | 1  | 2  | 1  |    | 9  | 74                    | 12               | 6.16  |
| 10. Growing Into Maturity       | 2  |    | 8  |    | 2  |    |   | 12 |    | 5  |    | 9  | 9  | 16 |    |    | 63                    | 8                | 7.87  |
| 11. Habit Forming Substances    | 2  | 4  | 3  |    | 2  | 5  | 1 | 1  | 3  | 1  | 5  | 1  | 1  | 1  |    | 4  | 34                    | 13               | 2.61  |
| 12. Meaning of Health           | 4  |    |    |    | 3  |    | 1 |    |    | 3  |    |    |    | 3  | 4  |    | 18                    | 5                | 3.60  |
| 13. Mental and Emotional Health | 3  | 3  | 10 | 9  | 1  | 3  | 6 |    |    | 8  |    | 21 | 18 | 16 |    | 4  | 102                   | 12               | 8.50  |
| 14. Nutrition and Health        | 6  | 11 | 4  | 3  | 12 |    | 6 | 26 | 3  | 5  | 7  | 1  | 1  | 2  | 12 |    | 99                    | 14               | 7.07  |
| 15. Personal Appearance         | 6  |    | 5  | 2  | 2  | 2  | 7 | 2  | 4  | 10 |    | 6  | 3  | 7  | 1  |    | 57                    | 14               | 4.07  |
| 16. Physical Fitness            | 9  | 5  | 6  | 5  | 7  | 14 | 8 |    |    | 15 |    |    |    | 6  | 7  | 5  | 87                    | 11               | 7.90  |
| 17. Recreation and Relaxation   |    |    |    | 1  |    |    | 1 |    |    | 1  | 1  | 1  | 1  | 1  |    | 2  | 9                     | 8                | 1.12  |
| 18. Safety and Health           | 6  | 1  | 4  | 11 | 5  | 12 | 4 | 8  | 5  |    | 6  | 5  | 5  | 1  |    | 4  | 77                    | 14               | 5.50  |
| 19. Scientific Health Services  |    | 1  | 6  | 8  |    | 2  | 1 |    |    | 2  |    | 2  |    |    |    | 3  | 25                    | 8                | 3.12  |
| 20. Vocations in Health         |    |    |    | 2  |    |    |   |    |    |    |    |    |    |    |    |    | 2                     | 1                | 2.    |

\*The numbers at the top of the table refer to the sixteen text books as listed in Appendix A

score as shown in Table IV. The number of times a below average score occurred for a topic in each book was subtracted from the total topics covered in each book to determine the above average scores in each book (See Figure 1). The percent to which each book had an above average score on each topic was computed and these percentages were translated into scores to be used on the comparative analysis table.

To score the range of topics in each of the selected textbooks the number of topics covered in each text was counted and a point of five on a one hundred point scale was assigned to each topic included. (See Figure 2).

#### EVALUATING AIDS IN THE USE OF THE TEXTS

In evaluating the aids in the use of the textbooks, Table V, page 46, a careful study was made of authoritative sources on what aids were important and necessary to include in health textbooks to make them valuable tools in the health instruction program. Each item was given a point value on a one hundred point scale according to its importance as determined by previous study of authoritative sources and research of this type. The assigned value of each book on each item were made as objectively as possible to determine the relative merits of the several books on each item of the criteria.

The standards for determining the scores on Teaching Aids were: details for presenting the material, practicality of suggested activity, adaptability of content to activity



| Texts                                    | Topics<br>Included | Topics<br>Below<br>Average | Topics<br>Above<br>Average | Per cent |
|--|--------------------|----------------------------|----------------------------|----------|
| 1. <u>Helping The Body In Its Work</u>   | 13                 | 7                          | 6                          | 46       |
| 2. <u>The Healthy Home and Community</u> | 11                 | 5                          | 4                          | 37       |
| 3. <u>Living and Doing</u>               | 14                 | 6                          | 8                          | 57       |
| 4. <u>Training For Living</u>            | 12                 | 4                          | 8                          | 66       |
| 5. <u>You and Your Health</u>            | 13                 | 10                         | 3                          | 23       |
| 6. <u>Good Health For All</u>            | 10                 | 6                          | 4                          | 40       |
| 7. <u>A Sound Body</u>                   | 16                 | 8                          | 8                          | 50       |
| 8. <u>Growing Up Healthy</u>             | 9                  | 5                          | 4                          | 44       |
| 9. <u>Health and First Aid</u>           | 8                  | 3                          | 5                          | 62       |
| 10. <u>For Healthful Living</u>          | 14                 | 9                          | 5                          | 35       |
| 11. <u>Good Health For Better Living</u> | 8                  | 2                          | 6                          | 75       |
| 12. <u>You're Growing Up</u>             | 16                 | 9                          | 7                          | 43       |
| 13. <u>Into Your Teens</u>               | 13                 | 9                          | 4                          | 30       |
| 14. <u>Building Health</u>               | 18                 | 11                         | 7                          | 44       |
| 15. <u>Health Progress</u>               | 8                  | 5                          | 3                          | 37       |
| 16. <u>Modern Ways To Health</u>         | 10                 | 3                          | 7                          | 70       |

FIGURE 1

PER CENT TO WHICH TEXTS SCORE ABOVE AVERAGE ON COVERAGE OF TOPICS

| Texts                                    | Topics<br>Included | Score |
|--|--------------------|-------|
| 1. <u>Helping The Body In Its Work</u>   | 13                 | 65    |
| 2. <u>The Healthy Home and Community</u> | 11                 | 55    |
| 3. <u>Living and Doing</u>               | 14                 | 70    |
| 4. <u>Training For Living</u>            | 12                 | 60    |
| 5. <u>You and Your Health</u>            | 13                 | 65    |
| 6. <u>Good Health For All</u>            | 10                 | 50    |
| 7. <u>A Sound Body</u>                   | 16                 | 80    |
| 8. <u>Growing Up Healthy</u>             | 9                  | 45    |
| 9. <u>Health and First Aid</u>           | 8                  | 40    |
| 10. <u>For Healthful Living</u>          | 14                 | 70    |
| 11. <u>Good Health For Better Living</u> | 8                  | 40    |
| 12. <u>You're Growing Up</u>             | 16                 | 80    |
| 13. <u>Into Your Teens</u>               | 13                 | 65    |
| 14. <u>Building Health</u>               | 18                 | 90    |
| 15. <u>Health Progress</u>               | 8                  | 40    |
| 16. <u>Modern Ways To Health</u>         | 10                 | 50    |

FIGURE 2

SCORES ON RANGE OF TOPICS



program, teacher's manual or guide, helps to teachers in making use of teacher-learning possibilities that lie beyond the textbook, variety of ways of presentation of material, provisions for meeting present day situations, audio visual aids, teacher information, and suggestions for parent participation.

The Pupil Activity was evaluated in terms of study helps and guides, adequate opportunities for drill, interesting and varied activities, timeliness of activities, practicality of the activities, social values, means of self appraisal, self-direction and improving, and changing health attitudes and behavior.

In determining the score value for Supplementary References points were given for magazine references, pamphlets, interesting books on related subjects, and sources of supplementary material available.

The Glossary of Terms was evaluated on: the presence of a glossary, a pronunciation guide, page reference of words, and adequacy of the glossary for the development of a vocabulary of scientific terms.

The presence of a reference book list for pupils and a reference book list for teachers was scored under the heading of Bibliography.

In evaluating the Index of a book a higher score value was given to those books that had the words indexed according

TABLE V  
AIDS IN THE USE OF THE TEXT

| AIDS                     | Point Value |    | *1 | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|--------------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Teaching Aids            | 25          | 10 | 10 | 20 | 20 | 10 | 10 | 10 | 10 | 10 | 5  | 23 | 23 | 25 | 25 | 25 | 5  | 5  |
| Pupil Activity           | 25          | 20 | 20 | 10 | 10 | 15 | 15 | 15 | 15 | 15 | 5  | 25 | 25 | 25 | 25 | 25 | 5  | 5  |
| Supplementary References | 15          | 15 | 15 | 0  | 0  | 0  | 0  | 15 | 15 | 0  | 10 | 10 | 10 | 10 | 10 | 15 | 0  | 0  |
| Glossary                 | 10          | 10 | 10 | 0  | 0  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 5  | 5  | 10 | 10 | 10 |
| Bibliography             | 5           | 5  | 5  | 0  | 0  | 0  | 0  | 5  | 5  | 0  | 5  | 5  | 5  | 2  | 2  | 5  | 0  | 0  |
| Index                    | 10          | 8  | 8  | 8  | 8  | 8  | 8  | 10 | 10 | 8  | 8  | 8  | 8  | 10 | 10 | 8  | 5  | 5  |
| Summaries                | 10          | 8  | 8  | 0  | 0  | 5  | 5  | 5  | 5  | 5  | 5  | 8  | 8  | 10 | 10 | 10 | 0  | 0  |
| Total                    | 100         | 76 | 76 | 38 | 38 | 48 | 48 | 70 | 70 | 33 | 89 | 89 | 87 | 87 | 87 | 98 | 25 | 25 |

\*The numbers across the top of the table refer to the sixteen textbooks as listed in Appendix A.



to general topics. The size of the print and clarity of the method of indexing was also evaluated.

The Summaries were evaluated as to whether they built for changing health behavior patterns, presented a progressive opening of doors of understanding, developed attitudes, pointed to increasingly assuming responsibility for student's own health, as the important ideas of the chapter were presented.

#### EVALUATING PHYSICAL FEATURES

In Table VI the Physical Features of the textbooks were evaluated. Each item was given a point value on a one hundred point scale according to its determined importance. The assigned values of each book on each item of the criteria were made as objectively as possible.

The Illustrations were evaluated on their attractiveness, usefulness, appeal to this age level, presentation of new ideas, development of new skills, and clearness.

In evaluating the Date of Publication the following point values were given:

|              |           |
|--------------|-----------|
| 1939 to 1941 | 5 points  |
| 1942 to 1945 | 10 points |
| 1946 to 1949 | 15 points |
| 1950 to 1953 | 20 points |

The print was evaluated as to the size of the print of the text, size of the print for the descriptions,



TABLE VI  
PHYSICAL FEATURES

| PHYSICAL FEATURES   | Point Value | *1 | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12  | 13  | 14 | 15 | 16 |
|---------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|----|----|----|
| Illustrations       | 15          | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 5  | 12 | 12 | 15  | 15  | 10 | 5  | 5  |
| Date of Publication | 20          | 15 | 15 | 15 | 15 | 20 | 20 | 15 | 15 | 10 | 20 | 20 | 20  | 20  | 20 | 5  | 5  |
| Print               | 10          | 8  | 8  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8  | 8  | 10  | 10  | 8  | 8  | 8  |
| Paper               | 10          | 8  | 8  | 5  | 5  | 10 | 10 | 10 | 10 | 8  | 8  | 8  | 10  | 10  | 8  | 8  | 8  |
| Table of Contents   | 10          | 10 | 10 | 10 | 10 | 8  | 8  | 10 | 10 | 10 | 10 | 10 | 10  | 10  | 10 | 5  | 5  |
| Chapter Headings    | 10          | 5  | 5  | 8  | 8  | 10 | 10 | 10 | 10 | 8  | 8  | 8  | 10  | 10  | 10 | 5  | 5  |
| Preface             | 15          | 10 | 10 | 12 | 12 | 10 | 10 | 12 | 12 | 15 | 15 | 15 | 15  | 15  | 15 | 12 | 12 |
| Appearance          | 10          | 5  | 5  | 8  | 8  | 10 | 10 | 10 | 10 | 5  | 10 | 10 | 10  | 10  | 8  | 5  | 5  |
| Total               | 100         | 71 | 71 | 78 | 78 | 90 | 90 | 89 | 89 | 71 | 91 | 91 | 100 | 100 | 89 | 53 | 53 |

\*The numbers across the top of the table refer to the sixteen textbooks as listed in Appendix A.

explanations and directions, and on the variety in size and kind of type used in chapter headings and subdivisions. If a book had 12 point type or better for the text, 10 point type or better for the description, etc., and had chapter headings and subdivisions of larger and varied style of print from the text, it was given a score of ten points. Samples of the various size type were obtained from the Stockton Unified School print shop with which to compare the size type in textbooks.

The Paper was judged as to dull finish, slightly glossy, or highly glossy.

The Table of Contents was evaluated as to whether they were understandable, stimulating, and had appeal to this age.

In evaluating the Preface it was determined whether there was an expression of an educational philosophy, and whether the preface stressed the importance of attitude of health and changing health behavior patterns.

The General Appearance of each book was evaluated as to cover, design, color, eye appeal, size of page, arrangement of book, and title.

The score values assigned to various items that make up the criteria for Physical Features are shown in Table VI page 48 and indicate the relative importance of each item on a one hundred point scale.

## CHAPTER VI

### RESULTS OF INVESTIGATION

In reporting the results of the investigation on the range and emphasis of content the topics are reported in order of their rank importance as determined by the investigation in Chapters III and IV on the health needs of pupils in the seventh and eighth grades.

Mental and Emotional Health was indicated as the leading health problem for this age level. In analyzing the content of the sixteen health textbooks, Table IV page 42, it was found that twelve out of the sixteen books included material on this important health area. The average score value was 8.5 or forty-three and one-half pages.

Fourteen textbooks had material on Nutrition and Health. The average number of pages given to this topic was thirty-five pages.

Only eight of the sixteen books had material on Community Health. The average number of pages was forty.

Material on Personal Appearance, fourth in importance and interest, was found in thirteen texts. The average number of pages was twenty.

In the area of Exercise, Rest and Fatigue thirteen texts had material on this topic. Fourteen and one-half pages was the average number.



Safety was covered in thirteen texts. The average number of pages was twenty-seven and one-half.

Care of Special Organs was covered in nine of the texts. The average number of pages was seventeen.

Growing Into Maturity was covered in nine of the texts. The average number of pages was thirty-nine and one-half.

All of the textbooks had material on Communicable Disease. The average number of pages on this topic was thirty-one and one-half pages.

Only eight out of the sixteen books had material on Recreation and Relaxation with five pages for the average coverage.

Fourteen of the texts had material on Habit Forming Substances. Thirteen and one-half pages was the average coverage.

Family Health had coverage in six books with an average of nineteen and one-half pages.

Eleven texts had material on Physical Fitness with an average of twenty-nine and one-half pages. Seven texts had material on Common Ailments with an average of five pages. Eleven texts had material on Scientific Health Services with an average of fifteen pages.

Material on Home Nursing and First Aid was found in twelve books with an average of thirty and one-half pages.

The Meaning of Health had coverage in six books with an average of eighteen pages.

None of the sixteen textbooks had any material on Atomic Warfare. This was considered an important area for health instruction and there was an expressed interest on the part of the students at this age level on this topic.

Only one book had any material to any extent on Vocations in Health.

Table VII page 55 shows the composite score of the sixteen textbooks on the criteria established for analysis.

In analyzing the composite scores to determine the relative merits of individual texts on the range and coverage of topics it was found that Book 11 had the highest score, 75, on coverage of topics and Book 5 had the lowest score, 23.<sup>1</sup> Book 14 had the highest score, 90 points, on the range of topics. Eighteen out of the twenty topics were covered in this book. Books 15, 11 and 9 scored the lowest, 40 points on range of topics, only eight out of the twenty topics were covered.<sup>2</sup>

Textbooks that are a part of a series show progressive expanding of learning experiences in health through grades seven and eighth and do not individually have the range of topics a book designed for use in both grade levels might

---

<sup>1</sup>Supra, Figure 1, p. 44.

<sup>2</sup>Supra, Figure 2, p. 44.

have. Textbooks 1 and 2, Helping the Body in Its Work and The Healthy Home and Community; 3 and 4, Living and Doing and Training for Living; 5 and 6, You and Your Health and Good Health for All; 7 and 8, A Sound Body and Growing Up Healthy; 10 and 11, For Healthful Living and Good Health for Better Living; 12 and 13, You're Growing Up and Into Your Teens; 15 and 16, Health Progress and Modern Ways to Health, are books of a series. An analysis of Table IV, page 42, showed:

1. Books 1 and 2 covered seventeen out of the twenty topics.
2. Books 3 and 4 had material on seventeen topics.
3. Books 5 and 6 had material on fifteen topics.
4. Books 7 and 8 had material on seventeen topics.
5. Books 10 and 11 had material on sixteen topics.
6. Books 12 and 13 had material on sixteen topics.
7. Books 15 and 16 had material on fifteen topics.

It was found that books which are a part of a series have the same aids and, therefore, have the same score on Aids in the Use of the Text.

The books arranged in the order of their scores, from highest to lowest, on Aids in the Use of the Text are:

- |                    |   |
|--------------------|---|
| 1. Book 14         | <u>Building Health</u>  |
| 2. Books 10 and 11 | <u>For Healthful Living</u><br><u>Good Health for Better Living</u> |
| 3. Books 12 and 13 | <u>You're Growing Up</u><br><u>Into Your Teens</u>                  |



- |                    |  |
|--------------------|--|
| 4. Books 1 and 2   | <u>Helping the Body in Its Work</u><br><u>The Healthy Home and Community</u> |
| 5. Books 7 and 8   | <u>A Sound Body</u><br><u>Growing Up Healthy</u>                             |
| 6. Books 5 and 6   | <u>You and Your Health</u><br><u>Good Health for All</u>                     |
| 7. Books 3 and 4   | <u>Living and Doing</u><br><u>Training for Living</u>                        |
| 8. Book 9          | <u>Health and First Aid</u>  |
| 9. Books 15 and 16 | <u>Health Progress</u><br><u>Modern Ways to Health</u>                       |

In evaluating the Physical Features it was found that books of a series have the same physical features and score the same.

The books arranged in order of their scores on Physical Features are:

- |                       |   |
|-----------------------|---|
| 1. Books 12 and 13    | <u>You're Growing Up</u><br><u>Into Your Teens</u>  |
| 2. Books 10 and 11    | <u>For Healthful Living</u><br><u>Good Health for Better Living</u>   |
| 3. Books 5 and 6      | <u>You and Your Health</u><br><u>Good Health for All</u>  |
| 4. Books 7, 8, and 14 | <u>A Sound Body</u><br><u>Growing Up Healthy</u><br><u>Building Health</u>                                  |
| 5. Books 3 and 4      | <u>Living and Doing</u><br><u>Training for Living</u>   |
| 6. Books 1, 2, and 9  | <u>Helping the Body in Its Work</u><br><u>The Healthy Home and Community</u><br><u>Health and First Aid</u> |
| 7. Books 15 and 16    | <u>Health Progress</u><br><u>Modern Ways to Health</u>  |

TABLE VII

Composite Scores

| TEXTBOOKS         |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
| Range of Topics   | 65  | 55  | 70  | 60  | 65  | 50  | 80  | 45  | 40  | 70  | 40  | 80  | 65  | 90  | 40  | 50  |
| Coverage          | 46  | 37  | 57  | 66  | 23  | 40  | 50  | 44  | 62  | 35  | 75  | 43  | 30  | 44  | 37  | 70  |
| Aids              | 76  | 76  | 38  | 38  | 48  | 48  | 70  | 70  | 33  | 89  | 89  | 87  | 87  | 98  | 5   | 5   |
| Physical Features | 71  | 71  | 78  | 78  | 90  | 90  | 89  | 89  | 71  | 91  | 91  | 100 | 100 | 89  | 53  | 53  |
| Total Score       | 258 | 239 | 243 | 242 | 226 | 228 | 289 | 248 | 206 | 285 | 295 | 310 | 282 | 321 | 135 | 178 |

In analyzing the results on the Composite Scores, Table VII, page 55, it was found that book 14, Building Health, had the highest composite score.

The books arranged in order from the highest to the lowest composite score are:

1. Book 14      Building Health
2. Book 12      You're Growing Up
3. Book 11      Good Health for Better Living
4. Book 7       A Sound Body
5. Book 10      For Healthful Living
6. Book 13      Into Your Teens
7. Book 1       Helping the Body in Its Work
8. Book 8       Growing Up Healthy
9. Book 3       Living and Doing
10. Book 4       Training for Living
11. Book 2       The Healthy Home and Community
12. Book 6       Good Health for All
13. Book 5       You and Your Health
14. Book 9       Health and First Aid
15. Book 16      Modern Ways to Health
16. Book 15      Health Progress

In Table VIII, page 57, texts were arranged in rank order under the headings: Range, Coverage, Aids, Physical Features, and Composite Scores for the purpose of facilitating further comparative study and report.



TABLE VIII

RANK ORDER OF TEXTS ON RANGE, COVERAGE, AIDS,  
PHYSICAL FEATURES, AND COMPOSITE SCORES

| Rank Order | Range   | Coverage | Aids  | Physical Features | Composite Scores |
|------------|---------|----------|-------|-------------------|------------------|
| 1          | *14     | *11      | *14   | *12-13            | *14              |
| 2          | 7-12    | 16       | 10-11 |                   | 12               |
| 3          |         | 4        |       | 10-11             | 11               |
| 4          | 3-10    | 9        | 12-13 |                   | 7                |
| 5          |         | 3        |       | 5-6               | 10               |
| 6          | 13-5-1  | 7        | 1-2   |                   | 13               |
| 7          |         | 1        |       | 7-8-14            | 1                |
| 8          |         | 8-14     | 7-8   |                   | 8                |
| 9          | 4       |          |       |                   | 3                |
| 10         | 2       | 12       | 5-6   | 3-4               | 4                |
| 11         | 16-6    | 6        |       |                   | 2                |
| 12         |         | 15-2     | 3-4   | 1-2-9             | 6                |
| 13         | 8       |          |       |                   | 5                |
| 14         | 15-11-9 | 10       | 9     |                   | 9                |
| 15         |         | 13       | 15-16 | 15-16             | 16               |
| 16         |         | 5        |       |                   | 15               |

\*The numbers refer to textbooks as listed below.

1. Helping The Body In Its Work
2. The Healthy Home and Community
3. Living and Doing
4. Training For Living
5. You and Your Health
6. Good Health For All
7. A Sound Body
8. Growing Up Healthy
9. Health and First Aid
10. For Healthful Living
11. Good Health For Better Living
12. You're Growing Up
13. Into Your Teens
14. Building Health
15. Health Progress
16. Modern Ways To Health

## CHAPTER VII

### SUMMARY AND CONCLUSIONS

#### LIMITATIONS

This study was limited to the evaluation of sixteen health textbooks designed for instruction in seventh and eighth grades. A critical comparative analysis was made of the range and scope of the contents of these sixteen texts, of the aids in the use of the books, and of the physical features. No attempt was made to determine the reading level or the accuracy of the information of the sixteen books.

In evaluating the coverage of the contents of a textbook no standard number of pages was established as the maximum criterion. In considering the adequacy of the number of pages devoted to a topic in each book the average score on each topic in all the texts was computed.<sup>1</sup> It was then determined whether, in a particular book, the score on each topic came up to or fell below the average score established for each topic. The minimum standard was one point for each five pages devoted to a topic. A lack of a score on a particular topic did not necessarily indicate that the text did not have any material on this topic.

---

<sup>1</sup>Cf. ante., Table IV p. 42, Figures 1 and 2 p. 44.

The educational background and the qualifications of the authors were not evaluated, nor was the scholarship of the presentation of material in the texts.

The evaluation of the texts on the criteria established was done as objectively as possible. The knowledge of the needs and interests of pupils of this age level and the teaching experience with these pupils on the part of the investigator may have influenced the scoring of some items to some extent, namely, the teaching aids, the pupil activity, the illustrations, chapter headings, and the general appearance of the texts.

#### SUMMARY

A critical comparative analysis of sixteen health textbooks for instruction in the seventh and eighth grades was made. Standards or criteria by which to evaluate the texts were established. A score card was constructed and values were assigned to each item in accordance to its importance. Each book on each criterion was assigned a point value that represented the extent to which the text met the criterion. A comparative study was made to determine the relative merits of each book on the criteria established. The total point score computed for each book represented its relative merit.

It was established that any textbook to be a valuable tool to learning must include those learning experiences



that had a range and emphasis of topics which answer the health needs, present and future, of the pupils and were timely and of interest to them. The aids in the use of a textbook were found to be of importance in evaluating textbooks for health instruction. If the teaching aids gave methods and procedures that were practical and helpful; the pupil activity timely, interesting, and self-directing; the reference and resource material easily available; the text was evaluated as one of the important tools in giving direction to learning and improving health behavior patterns.

In evaluating health text it was necessary to consider the physical properties of the texts: the illustrations, the date of publication, the print, the quality and the finish of the paper, the table of contents, the chapter headings, the preface, and the general appearance of the texts.

In evaluating health textbooks designed for health instruction in the seventh and eighth grades it was ascertained that text fourteen, Building Health, had the greatest range of topics, the highest score on aids in the use of the texts, and the highest composite score.

It was discerned that books which are a part of a series present material that gave progressively an expanding of learning experiences in health instruction. No one book of a series scored high on criteria established on range and emphasis of topics. It was necessary to consider how one

book of a series progressively supplemented the previous one, presenting material for instruction in expanding needs and interests.

Textbooks twelve and thirteen, You're Growing Up and Into Your Teens of the Scott-Foresman Series, had the second and sixth highest score on the composite score. Together these books had a topic range of sixteen out of the twenty topics scored. They scored third highest as to aids and in physical features scored one hundred points. The physical features of You're Growing Up and Into Your Teens are especially designed for use in the seventh and eighth grades. The books rate high in appearance and interest appeal.

Books ten and eleven, Good Health for Better Living and For Healthful Living, The Road to Health Series, ranked fifth and third in composite scores. On aids they ranked second and on physical features third. These texts had material on sixteen out of the twenty topics.

Books seven and eight, A Sound Body and Growing Up Healthy, ranked fourth and eighth on the composite scores. Together these two books covered seventeen out of twenty topics. They ranked fourth in the physical features score and fifth in aids in the use of the text.

Books one and two, Helping the Body in Its Work and The Healthy Home and Community, ranked seventh and eleventh place on the composite scores but low on the physical



features score. These two books covered seventeen out of the twenty topics.

Books five and six, You and Your Health and Good Health for All, ranked thirteenth and twelfth on the composite scores. They covered fifteen out of the twenty topics, ranked sixth in aids and fourth in physical features.

Health Progress and Modern Ways to Health, The American Health Series, books fifteen and sixteen, are the books designated for health instruction in the seventh and eighth grade as the California State Series. These books had the lowest score in the content area, in aids, in the use of texts, and in the physical features. These books had the lowest composite score of any of the sixteen health textbooks evaluated.

#### CONCLUSION

It was found that criteria had to be developed by which to evaluate the selected textbook. In establishing the criteria it was necessary to study educational authority on evaluating textbooks, literature on curriculum, courses of study on health, methods of teaching, developmental characteristics of pupils of this age level, and previous research on textbook selection and evaluation. This study was necessary to insure validity and reliability to criteria and to determine which criteria could adequately be evaluated by the investigator.



According to the investigation there are health texts written for the seventh and eighth grade health instruction program that are valuable tools to the learning process. In comparing the relative merits of sixteen health texts on the criteria established some texts had greater merit than others and would, therefore, be of greatest value as tools to learning in the health instruction program.

The top ranking book, Building Health, does not measure up to the criteria established in all respects. Out of a possible total score of 400 points this text scored 321 points.

In evaluating the range of topics it was discerned that Building Health, book number 14, did not include information on Atomic Warfare and Vocations in Health. These two topics, according to investigation, were the least important topics.<sup>2</sup>

Eleven out of eighteen topics were below the average score established for coverage on each topic. Of these topics, seven had only the minimum score of one point indicating that in those areas of community, dental, family health, first aid and home nursing, safety, scientific health services and the meaning of health there was brief but adequate material.

---

<sup>2</sup>Supra, p. 18.

Some of the physical features were not judged as meeting the criteria established. The illustrations were not very attractive or stimulating and in some cases not easily interpreted. The print for some of the directions was too small and the appearance of the book was marked down because the page was larger than other texts evaluated and divided into two columns. A two-column page makes for easy quick reading but too large a page is not attractive to this age level.

Even though this text did not measure up in the above mentioned instances Building Health was judged to be an excellent tool for health instruction. It was designed to improve health attitudes and habits of pupils and was based on the needs and interests of pupils. It included plenty of doing experiences adaptable for teacher and pupil planning. There were good teaching aids and suggestions that the author had found practical and effective in the classroom. The teaching aids, pupil activity, supplementary references, and general organization of the text make it a valuable tool to be used as a frame of reference, as an aid to curriculum planning, as a supplement to a guide, and as a text when the mastery of certain information is the immediate objective.

Textbooks number 12 and 13, You're Growing Up and Into Your Teens, two books of a series designed for seventh and eighth grades, were evaluated and scored the highest of the books in a series. The particular shortcomings of these

books were in the range of topics. Those topics not included in You're Growing Up were: Atomic Warfare, Meaning of Health, Physical Fitness, and Vocations in Health. Into Your Teens, in addition to the above topics, did not have an appreciable amount of material on Common Ailments, Community Health, and Scientific Health Services.

As to coverage on each topic in You're Growing Up, Common Ailments, Communicable Disease, Family Health, Growing Into Maturity, Mental and Emotional Health, Personal Appearance, and Recreation and Relaxation had average or above average scores. The other topics included were adequately covered. In the text for eighth grade, Into Your Teens, three topics, Family Health, Growing Into Maturity, and Mental and Emotional Health had above average scores. The number of pages on the other topics were adequate.

These textbooks were outstanding in that they had a wide range of teaching techniques, included those topics of greatest need and interest to pupils of this age level, and presented the material in a style most appealing to pupils. The illustrations were unusually attractive and stimulating. The material was written with a high degree of readability for pupils---stories, case histories, every situation written in a style that was interesting.



Textbooks number 15 and 16, Health Progress and Modern Ways to Health, lacked a wide range of topics.<sup>3</sup> Some notable shortcomings of Health Progress, the seventh grade health text, were: Dental Health, Exercise Rest and Fatigue, Family Health, First Aid, Growing Into Maturity, Habit Forming Substance, Mental and Emotional Health, Recreation and Relaxation, and Safety and Health. In Modern Ways to Health information was omitted on Exercise Rest and Fatigue, Family Health, Growing Into Maturity, Meaning of Health, and Nutrition and Health.

The number of pages on each topic was adequate.

These textbooks lacked detail for presenting the material, guides and aids to teaching, audio visual aids, and provisions for meeting present day situations and problems in health.

The activities suggested for the pupils were not timely nor interesting and were in many cases impractical. There were no study helps, guides, or interesting things to do. The activities suggested would not bring about an experience in healthful living that is necessary if health attitudes and behavior are to improve. There were no magazine or book references to be used as supplementary material.

Not every chapter included a summary. Those chapters that did, had summaries of the chapter with no challenging

---

<sup>3</sup>Supra, Table IV, p. 42, and Figures 1 and 2, p. 44.

statements that might give direction and stimulus to changing health behavior patterns.

The illustrations were out of date and unattractive. They did not add to the understanding of the content, nor did they develop any new ideas.

These textbooks were published in 1943 and were very much out of date as to content, needs and interests of pupils, physical features, and style in presenting material.

Investigation revealed that the topics most often omitted were: Atomic Warfare, Vocations in Health, Meaning of Health, Common Ailments, Family Health, Growing Into Maturity, Recreation and Relaxation, Community Health, and Scientific Health Services. Those topics that most often had less than the established average number of pages in the sixteen texts were: Communicable Disease, First Aid and Home Nursing, Habit Forming Substance, Nutrition and Health, Physical Fitness, and Safety and Health.

In general, more health textbooks should have material on Family Health, Meaning of Health, Common Ailments, Community Health, Growing Into Maturity, Recreation and Relaxation, and Scientific Health Services. None of the sixteen health books evaluated had information on Atomic Warfare. Only one of the sixteen books had material on Vocations in Health. The Meaning of Health was included in only five of the sixteen health texts, Family Health in only six texts, Common Ailments in only seven of the texts, and

Community Health, Growing Into Maturity, Recreation and Relaxation, and Scientific Health Services were included in only eight texts.

Topics that were included that could be omitted because they have no great significance or interest to this age level were: Structure and Function of the Body, Heredity and Eugenics, Chronic Diseases, and Occupational Diseases.

#### RECOMMENDATIONS

In selecting textbooks for use in a health instruction program designed for changing health behavior patterns it is recommended that a careful evaluation be made on the relative merits of each text on each criterion established. Criteria to be valid and reliable must be established only after the study of educational authority on evaluating texts, literature on curriculum, courses of study, methods of teaching, needs and interests of pupils, and research on textbook evaluation and selection.

It is recommended that a new health textbook be adopted as the California State Series text if the policy of having state texts is to continue. In the selection of this text there should be a planned study of the relative merits of available textbooks to insure carefully selected content based on needs and interests of pupils, study aids that facilitate learning, and physical features that stimulate



interest. Provision should be made for revisions of the text to insure timely, scientifically accurate information.

Recognizing the need and interest in Atomic Warfare in relation to health and safety and realizing the lack of information in health texts on this subject it is recommended that supplementary material available in local and government bulletins be used.

Because of the emerging interest in vocations it is recommended that supplementary material be used to introduce to pupils of this age level the possible vocations in the field of health.

Health textbooks which present range and coverage of topics that satisfy the needs and interests of pupils, that are keystones to planned teaching, that are scientific basis for intelligent self-direction in changing health behavior of pupils are valuable and important tools to learning in the health instruction program. Careful evaluation of health textbooks must be made to determine the relative merits of texts on the qualities that will insure their value as tools to learning.

## BIBLIOGRAPHY

## BIBLIOGRAPHY

## A. BOOKS

- Brownell, Clifford. Principles of Health Education Applied. New York: McGraw-Hill Book Company, Inc., 1949. 366 pp.
- \_\_\_\_\_, and Jesse Feiring Williams. The Administration of Health Education and Physical Education. Philadelphia: W. B. Saunders Company, 1951. 439 pp.
- Conrad, Howard L., and Joseph F. Meister. Teaching Procedures in Health Education. Philadelphia: W. B. Saunders Company, 1938. 158 pp.
- Grout, Ruth E. Health Teaching in Schools. Philadelphia: W. B. Saunders Company, 1948. 320 pp.
- Kilpatrick, William Heard. Philosophy of Education. New York: The Macmillan Company, 1951. 465 pp.
- Oberteuffer, Delbert. School Health Education. New York: Harper & Brothers, 1949. 405 pp.
- Strang, Ruth M. and Dean Smiley. The Role of the Teacher in Health Education. New York: The Macmillan Company, 1946. 359 pp.
- Turner, C. E. School Health and Education. St. Louis: The C. V. Mosby Company, 1947. 457 pp.
- \_\_\_\_\_. Principles of Health Education. Boston: D. C. Heath and Company, 1939. 335 pp.

## B. PERIODICAL ARTICLES

- Barton, William H., and others. "Needed Research on Textbooks," The Phi Delta Kappan, 33:297-300, January, 1952.
- Buckingham, B. R., and others. "What Are Textbooks For," The Phi Delta Kappan, 33:41-3, January, 1952.
- Burnett, Lewie W. "State Textbook Policies," The Phi Delta Kappan, 33:257-261, January, 1952.
- California State Department of Education. "Criteria for Textbook Evaluation," National Association Secondary School Principals Bulletin, 35:10, October, 1951.



- Christensen, Arnold. "The Determination of a Reading Vocabulary in Junior High School," The Research Quarterly, 11:121-25, May, 1940.
- Drury, Blanche Jessen. "Present Practices in Health Instruction in California," The Research Quarterly, 24:392-400, December, 1945.
- Durrance, V. R. "Public Textbook Selection in Forty-Eight States," The Phi Delta Kappan, 33:262-6, January, 1952.
- Eck, William L., and Albert J. Nagell. "Health Units That Meet Pupil Needs," Journal of the American Association for Health, Physical Education and Recreation, 23:24-6, November, 1952.
- Gates, Arthur I. "What Do We Know About Optimum Length of Line in Reading," Journal of Educational Research, 23:1-7, January, 1931.
- Haag, J. H. "Discovering Needs and Interest for Health Instruction," Journal of the American Association for Health, Physical Education and Recreation, 24:23, January, 1953.
- Institute of American Textbook Publishers. "Six Tests of Textbooks," American School Board Journal, 122:25, June, 1951.
- \_\_\_\_\_. "Functions of the Textbook," The Phi Delta Kappan, 33:256, January, 1952.
- Irwin, Leslie W., and Staton Wesley. "A Determination of Fundamental Concepts of Healthful Living," The Research Quarterly, 22:2-27, March, 1951.
- Kilander, H. F., and others. "The Accuracy of Health Content of School Textbooks," Journal of School Health, 23:216-22, September, 1953.
- Lantagne, Joseph E. "Health Interests of 10,000 Secondary School Students," The Research Quarterly, 23:330-346, October, 1952.
- Nelson, Henry B. "Selecting Textbooks for the Schools," School Review, 56:502-03, November, 1948.
- Patty, W. W., and W. I. Painter. "Improving Our Methods of Selecting High School Textbooks," Journal of Educational Research, 24:23-32, June, 1931.

Rothlein, B. E. "The Relative Legibility of Different Faces of Printing," American Journal of Psychology, 23:1-36, January, 1942.

Tinker, Miles A. "Criteria for Determining the Readability of Type Faces," Journal of Educational Psychology, 35: 385-96, October, 1944.

Van Til, William. "A Fable of Textbook Strategy," Educational Leadership, 5:215-220, January, 1948.

Waterman, Ivan R. "When You Choose a Textbook," The Phi Delta Kappan, 33:267-271, January, 1952.

#### C. PARTS OF A SERIES

Bruner, Hubert B. Criteria for Evaluating Teaching and Learning Practices. Reprint, What Our Schools Are Teaching. New York: Bureau of Publications, Teachers College, Columbia University, 1941. 14 pp.

#### D. PUBLICATIONS OF LEARNED ORGANIZATIONS

American Association of School Administrators. Health in the Schools, Twentieth Yearbook. Washington, D. C.: National Education Association, 1951. 477 pp.

Buckingham, R. B. "New Data of the Typography of Textbooks," The Textbook in American Education, Thirtieth Yearbook of the National Society for the Study of Education, Part II. Bloomington, Illinois: Public School Publishing Company, 1931. Pp. 93-125.

Wilson, Charles. Health in Education, Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Washington, D. C.: National Education Association, 1951. 413 pp.

#### E. UNPUBLISHED MATERIAL

Burnett, Lewie W. "Textbook Provision in the Several States With Emphasis on California." Unpublished Doctor's dissertation, Stanford University, Palo Alto, 1948.



Denver Public Schools. "Health Interests of Children,"  
Report of a Research Study on Health Interests and Needs  
of Children. Denver: Denver Public Schools, 1947.  
121 pp.

Knox, Walter S. "Teaching Manual Personal Hygiene,"  
Stockton, California: Stockton Junior College, 1947.  
Pp. 60-1.

\_\_\_\_\_. "Criteria for Judging Supplementary Books."  
Central Library, Stockton Unified School District,  
Stockton, California.



## APPENDIX A

## HEALTH TEXTBOOKS EVALUATED

1. Address, J. M., I. H. Goldberger, and G. T. Hallock. Helping the Body in Its Work. New York: Ginn and Company, 1949. 314 pp.
2. Address, J. M., I. H. Goldberger, and G. T. Hallock. The Healthy Home and Community. New York: Ginn and Company, 1949. 339 pp.
3. Brownell, Clifford Lee, and J. F. Williams, Living and Doing. New York: American Book Company, 1946. 346 pp.
4. Brownell, Clifford Lee, and J. F. Williams. Training for Living. New York: American Book Company, 1946. 347 pp.
5. Burkard, William E., R. L. Chambers, and F. W. Maroney. You and Your Health. Wilkes-Barre: Lyons and Carnahan, 1953. 375 pp.
6. Burkard, William E., R. L. Chambers, and F. W. Maroney. Good Health for All. Wilkes-Barre: Lyons and Carnahan, 1953. 373 pp.
7. Charters, W. W., Dean F. Smiley, and Ruth M. Strang. A Sound Body. New York: The Macmillan Company, 1947. 341 pp.
8. Charters, W. W., Dean F. Smiley, and Ruth M. Strang. Growing Up Healthy. New York: The Macmillan Company, 1947. 302 pp.
9. Fishbein, Morris, and Leslie W. Irwin. Health and First Aid. New York: Lyons and Carnahan, 1944. 372 pp.
10. Jones, Edwina, Edna Morgan, and Paul E. Landis. For Healthful Living. Cleveland: Laidlaw Brothers, 1951. 320 pp.
11. Jones, Edwina, Edna Morgan, and Paul E. Landis. Good Health for Better Living. Cleveland: Laidlaw Brothers, 1951. 320 pp.
12. Schacter, Helen, Gladys Gardner Jenkins, and W. W. Bauer. You're Growing Up. Chicago: Scott, Foresman and Company, 1950. 320 pp.

13. Schacter, Helen, Gladys Gardner Jenkins, and W. W. Bauer. Into Your Teens. Chicago: Scott, Foresman and Company, 1950. 352 pp.
14. Williams, Dortha M. Building Health. Chicago: J. B. Lippincott Company, 1952. 429 pp.
15. Wilson, Charles C., and others. The American Health Series, Health Progress. Sacramento: California State Department of Education, 1943. 368 pp. (Seventh Grade)
16. Wilson, Charles C., and others. Modern Ways to Health. Sacramento: California State Department of Education, 1943. 366 pp. (Eighth Grade)



## APPENDIX B

BIBLIOGRAPHY OF AUTHORITATIVE  
SOURCES ON HEALTH NEEDS

BOOKS

1. American Association of School Administrators. Health in Schools. Washington, D. C.: National Education Association, 1942. 544 pp.
2. Cromwell, Gertrude C. The Health of the School Child. Philadelphia: W. B. Saunders, 1946. 256 pp.
3. Dobbs, Alma A. Teaching Wholesome Living. New York: A. S. Barnes & Company, 1939. 304 pp.
4. Grout, Ruth E. Health Teaching in Schools. Philadelphia: W. B. Saunders, 1948. 330 pp.
5. Lee, J. Murray, and Doris Mary Lee. The Child and His Curriculum. New York: D. Appleton-Century Company, 1940. Pp. 489-537.
6. National Education Association and American Medical Association. Health Education. Washington, D. C.: National Education Association, 1948. 413 pp.
7. Oberteuffer, Delbert. School Health Education. New York: Harper & Brothers, 1949. 405 pp.
8. Turner, C. E. School Health and Health Education. St. Louis: The C. V. Mosby Co., 1947. 401 pp.
9. Weber, Lynda M. Functional Health Teaching Syllabus. New York: Ginn and Company, 1941. 164 pp.
10. Williams, Jesse Feiring, and Ruth Abernathy. Health Education in Schools. New York: The Ronald Press Company, 1948. 227 pp.

GUIDES

11. Byrd, Oliver E. Health Instruction Guide. Visalia: Tulare County Schools, Office of Superintendent, 1951. 151 pp.

12. Denver Public Schools. Guide for Teachers in Developing a Program of Health Education. Denver: Denver Public Schools, 1946. 96 pp.
13. Fields, Morey R., and Avis E. Edgerton. Teacher's Guide for Health Education. Brooklyn: Rensen Press, 1949. 543 pp.
14. Los Angeles City Schools. Teaching Guide in Health Education. Los Angeles: School Publication, Los Angeles City Schools, 1943. 68 pp.
15. Merced County Schools. Teaching Guide for Health. Merced: Merced County Schools, Office of Superintendent, 1952. 76 pp.
16. Denver Public Schools. Health Interest of Children. Denver: Denver Public Schools, 1947. p. 3.

#### PERIODICALS

17. Avery, Elizabeth, and others. "Implications in Health Instruction," The Journal for Health, Physical Education and Recreation, 24:37-37, January, 1953.
18. Byrd, Oliver E. "Health Problems of Significance for Course and Curriculum Instruction," The Research Quarterly, 21:3-10, March, 1950.
19. Hicks, Dora A., "Scope of Health Instruction Grades One to Twelve," The Journal of School Health, 23:179-187, June, 1953.
20. Patty, W. W. "Trends in the School Health Program," The Journal of Health and Physical Education, 16:183-184, April, 1945.
21. Health Curriculum Workshop. "Health Needs and Interest of Pupils in the Secondary Schools," Unpublished Report of Health Curriculum Committee, Stockton Unified School District, Stockton, California, 1953.



## APPENDIX C

STOCKTON UNIFIED SCHOOLS  
HEALTH INTEREST CHECK LIST

School \_\_\_\_\_

Grade \_\_\_\_\_

Boy \_\_\_\_\_ Girl \_\_\_\_\_

YOUR CHOICE, PLEASE!

DIRECTIONS: We want to know if you would be interested in the scientific facts behind some of the following questions. Read each question carefully and in the column opposite the question check ( ) if you are interested. If you are not interested, leave the space blank. Do not answer the question.

Examples:

Interested

- |  |          |
|--|----------|
| 1. How does health influence one's ability to get a job? | 1. _____ |
| 2. What are the names of all the bones of the skull?     | 2. _____ |

QUESTIONS

APPEARANCE AND PERSONAL HEALTH

- |  |           |
|--|-----------|
| 1. What causes body odor?  | 1. _____  |
| 2. Does the use of deodorants cause serious skin irritation?         | 2. _____  |
| 3. What substances needed by the body are lost through perspiration? | 3. _____  |
| 4. Are pimples caused by poor digestion?                             | 4. _____  |
| 5. How can one break a habit like biting the fingernails?            | 5. _____  |
| 6. Can the skin absorb such things as vanishing cream, alcohol, etc? | 6. _____  |
| 7. What is the safest way to remove unwanted hair?                   | 7. _____  |
| 8. Is a coat of tan healthful?                                       | 8. _____  |
| 9. What is the best way to take care of the skin and scalp?          | 9. _____  |
| 10. Is chlorophyll of any value in preventing odors?                 | 10. _____ |

DENTAL HEALTH

- |  |          |
|--|----------|
| 1. What are the problems of tooth decay? | 1. _____ |
|--|----------|

## HEALTH INTEREST CHECK LIST (continued)

| <u>QUESTIONS</u>  | <u>Interested</u> |
|---|-------------------|
| <u>FOOD AND NUTRITION</u>   |                   |
| 1. What kind of dangerous parasites or bacteria are most commonly found in food?  | 1. _____          |
| 2. Should adults add to the regular diet with cod liver oil or vitamin capsules?  | 2. _____          |
| 3. Is the skipping of meals harmful to one's health?  | 3. _____          |
| 4. Will drinking coffee before bedtime keep a person awake?   | 4. _____          |
| 5. Are coffee, tea, cocoa and cola drinks harmful to our health?  | 5. _____          |
| 6. What does "pasteurization" do to milk?   | 6. _____          |
| 7. Does one get enough vitamins in the ordinary diet?   | 7. _____          |
| 8. Is overweight or underweight hereditary?   | 8. _____          |
| 9. What types of food should an athlete eat?  | 9. _____          |
| 10. Is it necessary to eat sea food occasionally to insure that a sufficient amount of iodine is being taken into the body?               | 10. _____         |
| 11. What is a balanced diet?  | 11. _____         |
| 12. Is buttermilk good for putting on weight?   | 12. _____         |
| 13. Why do most people weight more when they are 40 years of age than when they are 25 years of age?                                      | 13. _____         |
| 14. What food deficiency diseases (pellagra, rickets, etc.) are most likely to result from the diet restrictions imposed upon the people? | 14. _____         |
| 15. What is malnutrition and what is its effect on our health?  | 15. _____         |
| 16. Is it true that certain vegetables or fish should not be eaten at the same meal with milk?  | 16. _____         |
| 17. Is fish a brain food?   | 17. _____         |
| 18. What are the dangers of using drugs for reducing?   | 18. _____         |
| 19. Is there any danger in allowing food to stay in an opened can for several days?   | 19. _____         |
| 20. Should one eat fried foods?   | 20. _____         |
| 21. How much can one rely upon the information given in food advertising on the labels of food products?                                  | 21. _____         |



## HEALTH INTEREST CHECK LIST (continued)

| <u>QUESTIONS</u>  | <u>Interested</u> |
|---|-------------------|
| <u>FOOD AND NUTRITION (contd.)</u>  |                   |
| 22. Is there any danger of becoming poisoned by eating fruits and vegetables that have been sprayed with arsenic? | 22. _____         |
| 23. How does bicarbonate of soda or a similar substance affect digestion?   | 23. _____         |
| 24. Is constipation dangerous if a person is healthy in other respects?   | 24. _____         |
| <u>MENTAL AND EMOTIONAL HEALTH</u>  |                   |
| 1. What are some of the changes that take place in teen-age youth?  | 1. _____          |
| 2. What are the causes of mental illness?   | 2. _____          |
| 3. How can a person get along with his parents?   | 3. _____          |
| 4. How can we make other people like us?  | 4. _____          |
| 5. How does mental health affect physical health and vice versa?  | 5. _____          |
| 6. What influence can parents have on children?   | 6. _____          |
| 7. How can bashfulness be overcome?   | 7. _____          |
| 8. What adjustments to the opposite sex are necessary for happiness?  | 8. _____          |
| <u>GROUP AND COMMUNITY HEALTH</u>   |                   |
| 1. Why is the number of military rejectees for physical defects so high?  | 1. _____          |
| 2. What are the duties of a public health department?   | 2. _____          |
| 3. What are the pros and cons of fluoridation?  | 3. _____          |
| 4. Is there a simple and safe way for a traveler or camper to make doubtful drinking water pure?                  | 4. _____          |
| 5. Can you use a public drinking fountain with safety?  | 5. _____          |
| 6. How do cities dispose of sewage?   | 6. _____          |
| 7. How is the problem of waste disposal related to the control of fly-breeding?                                   | 7. _____          |
| 8. What is the mosquito abatement program?  | 8. _____          |
| 9. Could smog be a problem in Stockton?   | 9. _____          |
| 10. Is it harmful to be a blood donor?  | 10. _____         |
| <u>EXERCISE, FATIGUE AND REST</u>   |                   |
| 1. Are people who take a great deal of exercise likely to die young?  | 1. _____          |
| 2. Does strenuous exercise strain the heart?  | 2. _____          |
| 3. How much sleep should a person get?  | 3. _____          |

## HEALTH INTEREST CHECK LIST (continued)

QUESTIONSInterestedINFECTION AND IMMUNITY

- |   |           |
|---|-----------|
| 1. Can some people carry disease germs and at the same time remain healthy?               | 1. _____  |
| 2. What should we know about polio?   | 2. _____  |
| 3. What should we know about tuberculosis?  | 3. _____  |
| 4. Does peat dust cause tuberculosis?   | 4. _____  |
| 5. Why is the Wasserman test required of those intending to marry?                        | 5. _____  |
| 6. How does it happen that colds often lead to more serious diseases?                     | 6. _____  |
| 7. What happens when one is inoculated or vaccinated against a disease?                   | 7. _____  |
| 8. How successful has gamma globulin been in the treatment of polio?                      | 8. _____  |
| 9. Will violent rays and sun lamps build up one's resistance to colds and other diseases? | 9. _____  |
| 10. Are the advertised throat antiseptics and cold remedies of any value?                 | 10. _____ |
| 11. What are antibiotics and are they useful?   | 11. _____ |
| 12. How can "athlete's foot" be avoided?  | 12. _____ |
| 13. What is the best way to prevent colds?  | 13. _____ |
| 14. Will exposure to strong sunlight kill many harmful bacteria?                          | 14. _____ |
| 15. Do throat sprays and lozenges have any protective effect against "flu" and colds?     | 15. _____ |
| 16. Are cold shots of any value in the prevention of colds?                               | 16. _____ |

SAFETY AND FIRST AID

- |   |          |
|---|----------|
| 1. What is the best way to treat a severe bruise?                               | 1. _____ |
| 2. What is the effect of massaging on the muscles?                              | 2. _____ |
| 3. Are there any rules which hikers should follow in traffic on a country road? | 3. _____ |
| 4. How can fainting be avoided?   | 4. _____ |
| 5. How can one stop arterial bleeding?  | 5. _____ |
| 6. Should one wait after a meal before going swimming?                          | 6. _____ |
| 7. What safety measures should be taken in and around water?                    | 7. _____ |
| 8. What is the best protection in case of atomic attack?                        | 8. _____ |
| 9. How are atomic blast injuries treated?                                       | 9. _____ |



## HEALTH INTEREST CHECK LIST (continued)

| <u>QUESTIONS</u>   | <u>Interested</u> |
|--|-------------------|
| <u>HEALTH AND PHYSICAL ENVIRONMENT</u>   |                   |
| 1. Are there conditions when the exhaust from automobiles on the streets of crowded cities is dangerous to health? | 1. _____          |
| 2. Is it healthful to have the windows wide open when sleeping no matter what the temperature is outside?          | 2. _____          |
| 3. What is the proper temperature and humidity for a school classroom or home?                                     | 3. _____          |
| 4. Does smoke from chimneys influence health?  | 4. _____          |
| <u>CHRONIC ILLNESSES</u>   |                   |
| 1. What causes hardening of the arteries?  | 1. _____          |
| 2. How can one prevent heart disease?  | 2. _____          |
| 3. What relation has diet and the use of salt to high blood pressure?  | 3. _____          |
| 4. Does cancer strike teen-agers?  | 4. _____          |
| <u>INTERNATIONAL HEALTH</u>  |                   |
| 1. What are the functions of the World Health Organization (WHO)?  | 1. _____          |
| 2. What has been the role of rats in the history of the world?   | 2. _____          |
| 3. Can bacterial warfare be successful?  | 3. _____          |
| <u>HABIT FORMING SUBSTANCES</u>  |                   |
| 1. Does smoking affect one's health?   | 1. _____          |
| 2. Should advertisement slogans about tobacco, alcohol and other products be accepted in total?                    | 2. _____          |
| 3. What is the relationship between the use of alcohol and drugs to accident and crime?                            | 3. _____          |
| <u>SCIENTIFIC HEALTH SERVICES</u>  |                   |
| 1. How should one select a physician and dentist?  | 1. _____          |
| 2. Of what value is the Federal Food and Drug Act in controlling the advertising of patent medicines?              | 2. _____          |
| 3. How can a person distinguish between beneficial patent medicines and useless and harmful ones?                  | 3. _____          |
| 4. What are the effects of various kinds of health pills on your body?   | 4. _____          |
| 5. What is health insurance?   | 5. _____          |



## HEALTH INTEREST CHECK LIST (continued)

| <u>QUESTIONS</u>   | <u>Interested</u> |
|--|-------------------|
| <u>HEREDITY AND EUGENICS</u>   |                   |
| 1. What physical and mental defects or diseases are hereditary?              | 1. _____          |
| <u>OTHERS</u>  |                   |
| 1. What are the facts about hormone preparations?                            | 1. _____          |
| 2. Does poor health affect the mind or vice versa?                           | 2. _____          |
| 3. What is allergy, and what are some of the more common allergies?          | 3. _____          |
| 4. Where would you be able to get a copy of your birth certificate?          | 4. _____          |
| 5. Why do schools give each pupil a health examination?                      | 5. _____          |
| 6. What are some of the hazards in industry, and how can they be avoided?    | 6. _____          |
| 7. What are the laws governing child labor, and why are such laws necessary? | 7. _____          |
| 8. What new discoveries in medicine are helping mankind?                     | 8. _____          |
| 9.   | 9. _____          |
| 10.  | 10. _____         |
| 11.  | 11. _____         |
| 12.  | 12. _____         |
| 13.  | 13. _____         |
| 14.  | 14. _____         |
| 15.  | 15. _____         |

TABLE III

SUMMARY OF FINDINGS ON HEALTH NEEDS AND  
INTEREST OF SEVENTH AND EIGHTH GRADE PUPILS

| NEEDS*                             | INTERESTS**   | AREAS FOR INSTRUCTION       |
|------------------------------------|---|-----------------------------|
| Mental and Emotional Health        | Developing self-confidence<br>Getting along with others<br>Being accepted<br>Developing broad interests       | Mental and Emotional Health |
| Nutrition and Health               | Basic food requirements<br>Effect of food on the body   | Nutrition and Health        |
| Community Health                   | Participating in the development and use of facilities  | Community Health            |
| Personal Appearance                | Good Grooming<br>Improving Posture<br>Care of skin and hair   | Personal Health             |
| Exercise, Rest and Fatigue         | Skill in sports<br>Exercise and physical fitness<br>Sleep needed  | Exercise, Rest, Fatigue     |
| Safety                             |   | Safety                      |
| Care of Special Organs             | Care of eyes  | Care of Special Organs      |
| Growing Into Maturity              | Understanding body changes<br>Interest in opposite sex<br>Adjustment to opposite sex<br>Adjustments to family | Growing Into Maturity       |
| Communicable Diseases              | Cause and prevention<br>Specific diseases<br>Body resistance<br>Conquest of disease                           | Communicable Diseases       |
| Recreation and Relaxation          | Relaxing through hobbies  | Recreation and Relaxation   |
| Habit Forming Substances           | Understanding the effects on the body   | Habit Forming Substances    |
| Dental Health                      | Care of the teeth<br>Problems of tooth decay  | Dental Health               |
| Structure and Function of the Body |   |                             |
| Family Health                      | Maintaining a balance between freedom and security<br>Getting along in the family                             | Family Health               |
| Physical Fitness                   | Health habits that affect physical fitness  | Physical Fitness            |
| Physical Environment               |   |                             |
| Scientific Health Services         | Fads and fallacies  | Scientific Health Service   |
| Common Ailments                    | Relief of common ailments   | Common Ailments             |
| First Aid and Home Nursing         | Caring for sick<br>Recognizing symptoms   | First Aid and Home Nursing  |
| Heredity and Eugenics              |   |                             |
| Meaning of Health                  |   | Meaning of Health           |
| Atomic Warfare                     | What to do in case of atomic attack<br>Prevention of injuries   | Atomic Warfare and Health   |
| Chronic Diseases                   | Cancer in teen-agers  |                             |
| Health as a Social Problem         |   |                             |
| Occupational Disease               | Becoming acquainted with careers in field of health   | Vocations in Health         |

\*Health needs as determined by investigation presented in Chapter II and opinions from authoritative sources listed in Appendix B.

\*\*Health interests as determined by Denver Public Schools, Health Interest of Children (Denver: Denver Public Schools, 1947) pp. 69-72 and by the Stockton Unified Schools, Health Interests Check List, Table II pp. 34 ff.