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A Description and an Appraisal of a Course of Study in Sex Education for Junior High School.

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A DESCRIPTION AND AN APPRAISAL OF A COURSE OF STUDY

IN SEX EDUCATION FOR JUNIOR HIGH SCHOOL

by

SUE BOOKER CHRISTIAN

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS
OF THE
COLLEGE OF WILLIAM AND MARY
FOR THE DEGREE
MASTER OF EDUCATION
1950

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CHAPTER I

INTRODUCTION

Statement of the problem. The purposes of this study are (1) to describe, and (2) to appraise a course of study in sex education for the junior high school.

Significance of the problem. Although the initial responsibility for wholesome sex training rests on the home, still comparatively few parents are meeting this responsibility.¹ Among the reasons for their failure are (1) lack of suitable vocabulary, knowledge, or ability to express that knowledge in terms the child can understand; (2) traditional objections and inhibitions; (3) unawareness of the need or indifference to the problem.

The increasing public demand for the schools to assume more responsibility in the field of sex education is in great evidence today. Many of the current magazines² provide or allot space for the expanding interest in sex education, which may be highly indicative of public interest. Furthermore, the results of

¹"An Approach to Sex Education in Schools," American Hygiene Association, New York: Publication A-365, 1948 Edition.

²Harold Isaacs, "Shall Our Schools Teach Sex," Newsweek, May 19, 1947, p. 20.

"Sex in Schoolroom," Time, March 22, 1948, p. 71.

"Sex Education in Oregon Schools," Life, May 24, 1948.

Betsy Bourne, "Teen Scene," Family Circle, January, 1949.

a questionnaire survey made during the spring of 1940 indicate that many school administrators also believe that more emphasis should be put on this phase of education.³ From the literature and the objective data now available one would be justified in saying that sex education has been inadequate to meet the needs of the past and present generation. For example, authorities in the field of sex educational research say:

Indications of unsatisfactory sex training and adjustment can be seen in the rate of illegitimate births, in the rising divorce rate, and in various sex crimes and delinquencies.⁴

Data⁵ from the extensive study made by Dr. Alfred C. Kinsey corroborate the evidence of early wide-spread sex activity. He found that "Eighty-five percent of the younger male population is eligible for conviction as sex offenders if our laws were strictly enforced".

The kind of an educational program in which the best help is given toward making an adequate sex adjustment must consist of more than factual knowledge. Such a program must attack the problem of emotional maturity and social adjustment.

³"Unpublished Thesis," by Evert R. Pearey, Education Committee of New Jersey on Social Hygiene, Publication 365.

⁴Benjamin Gruenberg, "High School and Sex Education," United States Public Health Service, Education Publication No.7,1940.

⁵Joseph Singerman, "Kinsey's Study of Sexual Behavior," The Science Teacher, February, 1948, p. 32.

Definition of the term Sex Education. It seems advisable to give a definition of the term "sex education". It is necessary to conceive of education in relation to sex as a phase of character education, of the "whole child". This broad concept is made necessary because of the very conditions which have forced the school to give thought to sex education. Gruenberg says:

Sex education means vastly more than instruction concerning the facts of reproduction as biological or psychological principles. The education contemplated is thus a social process. It must not be considered a special and isolated piece of "curriculum," to be taught at a given time and then dismissed as finished.⁶

Sources of data. In making this study these sources of material were drawn upon:

1. Books on sex education, and general works on sex problems.
2. Reports of special conferences on programs of sex education.
3. Reports of investigations made by the United States Public Health Service, and the Bureau of Education. These show the scope of the movement and suggest material for expanding the program.

⁶Benjamin A. Gruenberg, "High School and Sex Education," Educational Publications No. 7, U.S.P.H. Service, 1940.

4. Principal works in the field of education and psychology.

5. The investigator's experiment used in connection with general science at Albert H. Hill Junior High School.

Procedure. A course of study in sex education for junior high school was developed at Albert H. Hill Junior High School, Richmond, Virginia, during the school year 1946-1947. This course is described in Chapter III.

A survey of the literature giving the historic development of sex education in the United States is reported in Chapter II.

The selection and validation of criteria are presented in Chapter IV. The selection of criteria was made in light of the objectives set up in the course on sex education. These were drawn from seven categories. In case of each criterion, effort was made to establish its validity by logic and documentation.

The remaining portion of the study consists of the following chapters:

Chapter V - The Appraisal of the Course

Chapter VI - Summary of Findings and Recommendations.

CHAPTER II

SURVEY OF THE LITERATURE

In the United States, a definite movement for sex education probably began with the organization of the American Society for Sanitary and Moral Prophylaxis in New York City on February 9, 1905.¹ After this initial step, other similar societies were established during the next three years in the states of Pennsylvania, Illinois, and Oregon.² The movement took on an educational aspect of great promise when in 1909, the National Society for the Scientific Study of Education devoted its entire eighth yearbook to the topic: Education with Reference to Sex. This publication included a special paper on the subject: "Sex Instruction in the Schools".³

The tendency at this time was to unify the efforts of the various sex education societies, and, in 1913, the "American Federation for Sex Hygiene", and the "American Vigilance Association", came together to form the "American Social Hygiene Association".⁴ The larger organizations mentioned were located in the eastern part of the United States, but the western area also was giving much thought

¹Maurice A. Bigelow, Sex Education in New York, The Macmillan Co., 1926, p. 227.

²Ibid., p. 232.

³Helen C. Putnam, Sex Education in the Schools, Eighth Yearbook of the National Society for the Scientific Study of Education, Part II, Bloomington, Illinois, Public School Publishing Co., 1909, pp. 76-82.

⁴Maurice A. Bigelow, op. cit., p. 232.

to sex education.

In the meantime, the N.E.A. was showing considerable interest in the sex education movement. In 1912, the Association passed a resolution favoring the training of teachers for the work of sex education instruction in the schools.⁵

The various movements mentioned here do not cover completely the work done in the matter of sex education prior to World War I. With the coming of the war, however, the whole movement received more serious consideration than before that time.

In 1918, the Federal Government entered the field of sex education, and immediately steps were taken that gave wider scope to the cause. Through the cooperation of the Department of Health in each of the 48 states, the United States Public Health Service was able to unify the work to a degree unknown before. Between 1918 and 1927, 53 regional congresses for the discussion of sex education were held in various sections of the country.⁶

During the same period the United States Public Health Service, in collaboration with the United States Bureau of Education, was studying the movement as to the possibilities of utilization of sex education materials in the secondary schools. In 1930, the movement was given added impetus at the White House Conference on

⁵Maurice A. Bigelow, op. cit., p. 232.

⁶United States Public Health Series, Sex Education, A Symposium for Educators, V. D. Bulletin 86, Washington, D. C.

Child Health and Protection, when that body devoted much discussion to the program of sex instruction in the schools.⁷

In 1932, the N.E.A. in the Tenth Yearbook of the Department of Superintendence devoted the whole of Chapter Seven to this topic, sex education. At the same time the work of training teachers to carry out the program of sex education in the schools had been making steady progress. From 1924 to the present time, many of the leading institutions of higher learning, both Negro and white, have offered courses in regular term and summer sessions for the preparation of teachers in methods and procedures.⁸

From the above brief history, it can be seen readily that sex education in the nation at large, and in the schools in particular, is still a matter of much concern.

⁷W. F. Snow, "Social Hygiene and the White House Conference on Child Health and Protection, American Hygiene Association," New York City Pub. 722.

⁸M. J. Exner, "Progress in Sex Education," American Social Hygiene Association, New York City, 1929, Publication No. 660, p. 14.

CHAPTER III

A DESCRIPTION OF PROGRAM OF SEX EDUCATION FOR A JUNIOR HIGH SCHOOL

Introduction. So far as the early adolescent boy or girl is concerned, sex education in Richmond Public Schools is still in an experimental stage.¹ This was and still is the status of sex education in 1946, when the writer was told by her principal that the parent-teacher association² in this school had requested that all pupils entering the seventh grade be required to take the "integrated" course given in general science. As further proof of the interest of the P.T.A. in the sex education program in this particular school, the writer offers as documentary evidence an article found in the News Leader, September 19, 1946, page one, headed "HILL PATRONS STRONGLY BACK SEX PROGRAM":

The president of the P.T.A. had been 'deluged with telephone calls' from parents who feared an effort might be made to eliminate or seriously modify the sex education program in view of the complaint about the list of twenty words³ given boys and girls to be defined.

The list of words referred to above was given as a pre-test, containing

¹Albert H. Hill Junior High School is the only junior high school that offers science in the seventh grade.

²Recorded in minutes of P.T.A., Albert H. Hill Junior High School, April, 1946. Mrs. R. W. Beasley, President.

³See list of words in Appendix B, p. 81.

correct biological names of parts of the body. These words included names of the reproductive organs. After this publicity the P.T.A. invited all of its members to an open forum to air their views on the sex education course in this school. The writer gave a comprehensive report on this particular program in the seventh grade. The parents and patrons repeated their previous request that the course in sex education be continued in content as was given heretofore. With the unified backing of the P.T.A. and the administration,⁴ the writer now felt free to continue sex education in the general science class.

Setting. This school is located in a city with a population of two hundred and twenty-nine thousand and is attended by pupils from a better than average socio-economic group. This study was made in the first year of junior high school which is the seventh grade. There are usually four classes in seventh grade science. Reference will be made to one class of thirty-two, where this experiment was conducted and records were kept. The remaining three classes were given the same course in sex education. The ages of the experimental group ranged from twelve years to sixteen years, with a mean of 13 years. The first twelve weeks of the fall semester were devoted to the study of plants and animals, their development, forms, and life processes. The study of the human body and its many systems followed. This covered the last six weeks in

⁴See Appendix A, p. 67.

semester.

The Course in Sex Education for Junior High School

General Objectives. To help pupils secure desired scientific information regarding human growth and physiology by supplementing the teaching in the home.

To help pupils make satisfactory physical and emotional adjustments by presenting the facts of reproduction, physical inheritance, and growth in their proper relationships to the whole scheme of life.

To help boys and girls develop in their ability to associate with each other comfortably and happily.

Specific Objectives. To develop attitudes and appreciations which help the pupil to:

Seek from his parents or proper authorities information which will aid him in solving his problems.

Have a wholesome respect for his own body and accept as natural any individual differences in the matter of sex.

Be natural in his relationship with both sexes.

Respect the opposite sex.

Choose to behave in a manner acceptable to the mores of a community with high standards of conduct.

To develop knowledge and understandings which help the student to:

Gain in his knowledge of the structure and function of the human body.

Gain accurate information regarding the processes of human reproduction, growth and development.

Understand that there are physical differences between the sexes and that these differences are for the perpetuation of the species.

To develop skills and abilities which help the student:

Develop a scientific vocabulary which meets his need when talking about the body and its function.

Develop his ability to talk about the body and its processes without embarrassment.

Use charts, models and other visual aids as well as printed material and other sources to gain useful information.

Techniques and procedures of the course. The objectivity of science allows us to talk freely about any subject. Thus the biological portion of the general science course can serve as a medium for the teaching of human reproduction and sex education.

During the first twelve weeks of the fall semester, the boys and girls studied about plants and animals in general science. Beginning with the simple one-celled organism, the pupils went up the scale of complexity in animal forms through sea life, fish, amphibian, birds, and finally mammals. Each animal was studied from the standpoint of life habits. In addition, each pupil was responsible for a detailed study of one animal. The student found out about each of the six necessary functions of living organisms -- eating, digesting, excretion, breathing, circulation, and reproduction. The writer deliberately adhered to an evolutionary method for several reasons. First, she wanted to give the pupil a sense of orderliness and a sense of "connectedness" of all

animal life. Second, a terminology was acquired in these weeks which served us in good stead later on as we reached the human being. The continued repetition of the words "excretion", "reproduction", "sperm cells", "ova" make a great difference in the emotional attitudes of the pupils when they are applied to the human body. Third, the writer feels that the approach of the idea of sex at junior high school level should be made a gradual one, starting with the lower and more simple organisms. In this way sex concepts were learned gradually. This prevented the pupil from the shock of discovering a thing to be false which was thought to be true, which is psychologically harmful to the child. There are some boys and girls whose ideas about human reproduction are so far from the truth that even the experienced teacher of sex education is amazed at them as they are revealed later on in the teaching of human reproduction.

The study of the lower animals and plants lasted until after Thanksgiving. Then we began the study of the human body by systems. Large charts of the human anatomy showing the nervous, circulatory and digestive systems, etc., were used. During this time a notebook was started. Pupils made drawings, wrote compositions, collected pictures and stories to be used in this book about the human body. A valuable bi-product of this work was the training in the use of the library as a proper source of scientific information about the human body. While studying these systems and their functions, the causes, prevention, control and treatment

of diseases of these organs were discussed, for example, tuberculosis in the respiratory organs, heart trouble, diabetes, etc., which made it seem natural to talk about syphilis and gonorrhoea when they were studying the reproductive system.

At the beginning of the study of human reproduction, a question box was placed where pupils put questions they would like to have answered. They were told not to sign their names, but to state whether the question was asked by a boy or girl. (The writer has found when pupils are not required to sign their names the questions give a more reliable indication of their interests and needs.)⁵ "Every question", the writer assured the class, "is legitimate if it is asked sincerely". The questions that were collected from the question box covered every topic from the symptoms of pregnancy to the workings of heredity. The students' interests for the most part were wholesome. They were interested in the mechanics that bring human beings into the world. They were not interested, until later, in emotional drives, conflicts and repressions. Sample questions were:

"What do you do to get a baby?"

"Where was I before my mother and father were married?"

"Do you have to have babies?"

"Where does it come out of the father?"

"How does a baby breathe inside?"

⁵Frances B. Strain, Sex Guidance in Family Life, New York: The Macmillan Co., 1944, p. 277.

"How can the place be big enough?"

"How can you tell when the baby is ready to come out?"

"Why do I look like daddy when I grew in mother?"

A few questions showed the result of mis-education in the form of "gutter language", and some showed the influence of lurid newspaper stories and articles.

Segregation of boys and girls was practiced for two reasons: (1) The school administration⁶ recommended it. (2) This helped to establish an atmosphere free from restraint, because boys and girls in early adolescence are self-conscious and easily embarrassed. By previous arrangement with the librarians, groups of boys and girls were sent to the library in segregated groups. Here a definite assignment was carried out. Here, also, many of their questions were answered. This gave rise to other inquiries. This plan extended over an eight-day period -- four days for each segregated group in the library. The assignments were based on Frances Bruce Strain's book, Being Born, and the following chapters were used:

First Assignment

Chapters I, II and III

Questions for study and discussion:

How does life begin?

Where is the egg made?

Where is the sperm made?

What is fertilization?

⁶See Appendix A.

Second Assignment

Questions for study and discussion in these chapters were in "question and answer" form.

Chapters IV, V, VI, and VIII.

Third Assignment

By the time they reached this assignment they had had two classroom meetings and these chapters, VIII, IX, X, and XI, explained more fully what was discussed in the class meetings.

Fourth Assignment

Chapters XII and XIII were read as a summary of the book. The fast readers who finished earlier were urged to read one of these books:

The Stork Didn't Bring You, by Mary Horn.

Any Girl Can Be Goodlooking, by Hazel R. Cades.

Questions Girls Ask, by Helen Welshimer.

Behave Yourself!, by Allen and Briggs.

Your Manners Are Showing, by Betty Betz.

Attaining Manhood, by George W. Conner.

Attaining Womanhood, by George W. Conner.

Good Grooming, by Hawes.

Approach to the Classroom Discussions. The writer has found that the best way to begin the first lesson in the classroom is to begin at any point of current interest. This is usually with the unsigned questions. Those who have been used to a chronological

and evolutionary approach to biology will have difficulty at first in following this informal method. If there has been no previous sex education in the school, the first session may be marked by considerable tension -- giggling, whispering, glancing at each other. Usually one need take no notice but talk quietly. Some one will "shush" some one else. Restlessness will quiet down and will stay quieted down when the teacher begins to look over the questions taken from the question box. Most of all, the pupils enjoy the question and answer period. There has been developed an etiquette about these question slips; they must be guarded as a trust, not shared with other teachers, parents, etc.

Because much of the material which the teacher would draw upon in answering these questions lies well within the field of physiology, hygiene and adolescent psychology, it must be in accord with the latest researches and findings.

The materials will fall into six main topics:

1. Acceptable scientific terminology.
2. Physical growth changes during puberty.
3. Adolescent problems.
4. Knowledge of human reproduction.
5. Boy and girl relationships.
6. Creative and recreative pursuits.

The initiation of the topic on human reproduction marked the high spot in the study. It was natural to study the process of reproduction, for the study of each preceding animal form had ended

with a description of how the animal begets the next generation. Our terminology was now a common language and perhaps the only difference in the emotional reaction of the class was the eagerness of all to learn about how they came into the world. The organs of reproduction were first named, and on the blackboard diagrams were made of their approximate locations. After an examination of the testes, ovaries, sperm duct, and oviduct was made, the question of mating naturally arose for the meeting of sperm and ovum had been an important part of the previous discussions of reproduction. Briefly and plainly the sexual act was described. In Chapter IV of her book, Strain⁷ does this admirably. Once the question of mating and fertilization has been satisfactorily answered there is the fascinating story of the development of the fetus. Finally the process of birth is explained as well as the role of the doctor in the act of delivery. In dealing with venereal diseases the pupils are given a clear understanding of their cause and nature, without dwelling upon the horror of being afflicted with either of the diseases. When pupils ask about contraceptives, as they always do, they are told that there is medical advice available only from doctors which makes it possible to control the size of their families. The question of masturbation arose in the boy groups. Since it is the consensus of opinion among many

⁷Frances B. Strain, Being Born, New York: D. Appleton-Century Co., 1936, p. 36.

authorities that the chief problem in dealing with masturbation is the allaying of fears, that is emphasized in dealing with the subject. The concept of sin is strong in some boys' minds, and the writer tried to put the problem upon some basis other than moral right or wrong.

For assistance in the teaching of the many processes in reproduction, the most stimulating and helpful aids were the moving picture films. These films were shown during the course at appropriate times, in this order:

Visual Aids Used

The Endocrine Glands. This film shows the effect of the pituitary hormones on egg development and the stimulation of the mammary glands by the pituitary and ovarian hormones. After having studied about glands of internal secretion and at the beginning of the study of reproduction, this picture was shown to the mixed group.

In the Beginning is a twenty-minute film about evulation, fertilization and early development of the mammalian egg. Scenes of the sperm uniting with the ovum and time-lapsed photography of the cell division of a fertilized egg were shown after the classroom discussion on reproduction takes place. Before this film was shown much preparation was needed to develop the vocabulary required to understand the processes that took place.

Heredity is a narrative type of film with animated drawings that tells the story of heredity in an interesting manner.

The Story of Menstruation is a color film about the physiology of menstruation and the personal hygiene necessary to good grooming during this period. This was shown to both boys and girls in separate groups.

Personal Hygiene for Young Men is a ten-minute silent film about syphilis and how to prevent it. This was shown to both groups at different times.

The Magic Bullet is a twenty-minute short edition of the full-size movie based on the discovery of "606", a cure for syphilis. This was shown to a mixed group.

Reproduction Among Mammals is a film about the pre-natal development and birth of a pig. It was shown in segregated groups at the close of the study as a review of the course. By this time both boys and girls were able to understand all the biological terms used in describing the birth process.

Other visual aids were: a human skeleton, birth atlas, large charts on reproduction, and a preserved human baby in the pre-natal stage of development.

Content and Materials of the Course

I. Content of course the first twelve weeks of the first semester embraced the study of plants and animals and their life processes:

A. The origin of new individuals

1. Some beliefs about origins of living things
2. What Pasteur discovered about the origin of life
3. Growth and development
 - a. One cell plants and animals
 - b. Cell division in many cell plants and animals
 - c. How plants reproduce without seed
 - d. How plants produce seed
 - e. How some animals reproduce and rear their young
 - (1) insects
 - (2) fish
 - (3) frogs
 - (4) reptiles
 - (5) birds
 - (6) mammals (not including Man)

B. Making and using food

1. How plants make food
2. How foods are carried to living cells
3. How animals and plants get rid of waste

II. The last six weeks of the semester were spent studying the human body. This was done by studying it through systems in the following order:

The Skin

The Body Framework

The Muscles

The Circulatory System

The Respiratory System

The Nervous System

The Digestive System

The Work of the Kidneys

The Endocrine Glands

The Reproductive System

The following subject matter was developed in the study:

1. General discussion of physical growth and development
2. Discussion of structure and function of the human body
3. Use of scientific vocabulary
4. Skill in the use of charts, models, slides and films
5. When a film was shown there was adequate follow-up with discussion. If a pupil asked a question the teacher could not answer, she suggested a source of information they could both use.
6. The care of the body
 - a. Structures
 - b. Personal hygiene
 - c. Communicable and non-communicable diseases
 - d. Community health problems

Materials Used in Teaching the Course

Books

- Charters, W.W., and Strang, Ruth, Health Knowledge, New York: The Macmillan Co., 1935.
- Clemson, William, Jessie and others, Life Goes On, New York: Harcourt, Brace and Co., 1944. 36 copies.
- Crisp, Katherine B., Growing Into Maturity, New York: J. P. Lippincott Co., 1944. 30 copies.
- de Schweinitz, Growing Up, New York: The macmillan Co., 1938. 5 copies.
- Ets, Marie Hall, The Story of a Baby, New York: Viking Press, 1939. 1 copy.
- Levine, M.I., and Seligmann, Jean H., The Wonder of Life, New York: Simon and Schuster, 1940. 3 copies.
- Strain, Frances Bruce, Being Born, New York: Appleton-Century Co., 1940. 19 copies.
- Welshimer, Helen, The Questions Girls Ask, New York: E. P. Dutton Company, 1939.
- Zabriskie, Louise, Nurses' Handbook of Obstetrics, Philadelphia: J. P. Lippincott, 1940.

Evaluation. Evaluation began when a pre-test of twenty words was given at the beginning of the semester to determine the weaknesses in the pupils' previous training and to discover areas in which they needed specific direction. At the end of the study a post-test was given to find out how much factual information was gained after completion of a course in sex education.

The two objective tests were given near the end of the

course. Copies of the pre-test - post-test, multiple choice and situation tests may be found Appendix B.

Also, as a culminating activity, a notebook was made during the study of the human body. This consisted of drawings, compositions, pictures and articles on all the systems in the body. This was turned in to the teacher at the end of the course, and later was returned to the pupil.

While it is possible to evaluate knowledge, understandings, habits and abilities through objective and subjective tests, it is more difficult to evaluate attitudes and appreciations. The writer attempted to do this by several methods. By means of observation she was able to observe to what extent boys and girls were natural in their relationships with each other when they attended parties in the gymnasium on several occasions during the school year, how well they worked together in student participation activities, and how they conducted themselves in the library, cafeteria and on the yard. The writer asked the counselor of the seventh grade to summarize the observations she had made and these findings, also, may be found in Appendix A.

Audio-Visual Aids

The following list of 16 mm. films were procured for the Audio-Visual Department of the Richmond Public Schools, 407 North 12th Street, Richmond, Virginia.

Sound Films

Body Defense Against Disease; Circulation; Mechanics of Breathing; The Nervous System; The Digestive System; The Work of the Kidneys; Alcohol and the Body; Vitamin D; Vitamin B; The Teeth; How the Ear Functions; How the Eye Functions; Goodbye Mr. Germ; The Endocrine Glands; In the Beginning; The Story of Menstruation; Heredity; Reproduction Among Mammals.

Silent Films (16 mm.)

The Blood; The Body Framework; Digestion; The Work of Flowers.

These films came from the Bureau of Teaching Materials, State Department of Virginia, Richmond, Virginia:

The Magic Bullet (sound)

Personal Hygiene for Young Men (silent)

Miscellaneous

1. Newspapers, magazines and radio programs
2. Live materials were used as much as possible, such as insects, box turtles, frog eggs and tadpoles, snails, tropical fish, white rats, and microscopic life.
3. Non-living materials such as microscope slides, film strips, human skeleton and plaster anatomical figure.
4. Preserved specimens representing the whole animal kingdom, including the pre-natal stage of a human baby.

5. Large charts representing all the body systems, except reproduction of human beings.

6. Many pictures brought in by the pupils and an abundance of pictorial material collected through the years by the writer.

CHAPTER IV

SELECTION AND VALIDATION OF CRITERIA

In order to appraise the course of study in sex education described in this report, it was necessary to have certain measuring sticks or criteria.

The basic criteria selected for this appraisal were selected from the literature on sex education written by authorities in the field of public health, psychology, education and family education. The seven general categories from which the criteria were selected are:

1. School and community support
2. Selected matters of organization
3. The content of the course
4. Qualifications of the instructor
5. Creative and recreative pursuits
6. Counseling facilities
7. Evaluation

School and Community Support. Many current magazines¹ lend

¹Harold Isaacs, "Shall Our Schools Teach Sex?" Newsweek, May 19, 1947.

Betsy Bourne, "Teen Scene", Family Circle, January, 1949.
"Sex Education in Oregon Schools", Life, May 24, 1948.

space to the expanding interest in sex education, a practice that is highly significant in terms of public interest. Parents and civic organizations, when informed, are ready for sex education, but the initial step in the development of such programs, as well as the decisive one of implementation, rests with the educational world. Criticism usually comes from the uninformed. When under fire of public criticism a principal may be inclined to withdraw the work instead of enlisting the public support. Strain says:

Sex education is a growth process, which demands that everyone inside and outside the school must go along together . . . The public must be included in the teaching, must be made acquainted with the principles, techniques and personality of sex education, so different from that of the past.²

Gruenberg states emphatically,

Public support is already won in most communities . . . It is especially desirable to cooperate with health officials, social workers, professional groups, and newspapers. A practical program can take care of local situations . . . The school must get the endorsement of parents and their associations even at the cost of a slow, tedious process of parent education.³

From the foregoing statements the following criterion was set up concerning community support:

²Frances Bruce Strain, Sex Guidance in Family Relations, New York: The Macmillan Co., 1944, pp. 26 and 30.

³Benjamin Gruenberg, High Schools and Sex Education, United States Public Health Service, Publication 7, 1940, et passim.

1. An effective course in sex education should have the backing of
 - a. the administration
 - b. the parents
 - c. the teaching staff
 - d. civic organizations
 - e. newspapers

Selected Matters of Organization. Although the initial responsibility for wholesome sex training rests on the home, with the school supplementing and reenforcing home training, still, few parents are meeting this need.⁴ Strain says:

Sex education is a matter of co-operation between home and school, each doing his part. It should be a co-operative attack . . . After all the real part the home plays is not so much on the informational side as on the emotional side.⁵

Whether to segregate the boys and girls during the class-room instruction on sex education is one of the important questions to be decided. Strain⁶ says "Segregation is desirable in junior high school because of the new sex awareness during adolescence". The subcommittee on sex education of the Richmond Public Schools recommended in its report⁷ to the general committee that, "there be no separation of boys and girls, except where the instruction

⁴Problem of Sex Education in the Schools, U.S. Public Health Service, p. 6.

⁵Frances Bruce Strain, op. cit., pp. 33-34.

⁶Ibid., p. 36.

⁷See Appendix A.

deals with human reproduction and venereal diseases". Gruenberg⁸ favors segregation because he has found that boys and girls ask questions more freely in segregated groups.

Sex education need not be compulsory because there is generally no difficulty getting pupils to attend such a class. Usually it is not easy to accomodate those who wish to take the work. Strain⁹ says she has never known a student who did not want the knowledge. She has known them to stay after school and skip lunch period to continue the discussions.

The advocates of sex education recommend several methods of procedure by which the instruction should be given. One method is to identify the instruction as only an incidental part of the regular studies in the curriculum. Another procedure is to secure the services of physicians, nurses or special lecturers and discuss sex topics or distribute literature relating to sex. This method is called the direct or special method, and since it is only for occasional use, it is known as emergency sex instruction. Strain¹⁰ mentions the regular course, which is favored for senior high school, and the integrated course where sex education is incorporated into established courses of sufficient length to meet current developing needs. In various sources of materials examined, most of those who did propose methods were in agreement that where group

⁸Benjamin Gruenberg, op. cit., p. 13.

⁹Frances Bruce Strain, op. cit., p. 4.

¹⁰Ibid., p. 54.

instruction is given, it should be included in established courses.

Rapeer,¹⁰ Pringle,¹¹ Klapper,¹² Gruenberg,¹³ Beister¹⁴ and Dawe¹⁵ show distinct leanings toward integration. The direct method, however, is not without its advocates, Mall¹⁶ and Ellis¹⁷ favor this procedure in connection with sex topics.

Integration of sex knowledge in the general studies of the curriculum was formerly limited to biology, but gradually the list of studies has been expanded to a number of other courses found in high school. For example, integration has been found to be effective in physiology, hygiene, home economics, physical education and general science. Ideally, sex education should begin in the home, continue through the nursery school, the elementary and through high school. Unfortunately the school must often start at one point or another in the curriculum if and when an especially competent

¹⁰Louis W. Rapeer, Essentials of Educational Hygiene, New York: Charles Scribner's Sons, 1915, Chapter 23.

¹¹Ralph W. Pringle, Adolescence and High School Problems, New York: D.C. Heath and Co., 1922, Chapter 18.

¹²Paul Klapper, Contemporary Education, Its Principles and Practices, New York: Appleton Co., 1929, pp. 120-127.

¹³Benjamin Gruenberg, High Schools and Sex Education, U.S.P.H. Service Publication 7, p. 31.

¹⁴Lillian Beister, Personal Health and Human Relations, University of Minnesota Press, Minneapolis, Minnesota, 1947, p. 5.

¹⁵Eustace Chesser and Zoe Dawe, The Practice of Sex Education, New York: Roy Publishers, 1946, p. 71

¹⁶Dr. Albert Mall, The Sexual Life of the Child, New York: Macmillan Co., 1924, Chapter 9.

¹⁷Havelock Ellis, The Task of Social Hygiene, New York: Houghton Mifflin Co., 1912, Chapter 8.

teacher is qualified to make a beginning. One sacrifices the ideal and the preferred for the possibility of attainment. Strain¹⁸ says:

Junior high school has been a successful and favored starting point when it has been impossible to start at an earlier time. Because of the sexual maturation of boys and girls, and the new social demands the work receives ready justification by everyone.

A study of the boyhood sex experiences of 148 college men made by Exner¹⁹ showed that a large majority of boys got their first permanent impressions about sex from improper sources, and between the ages of ten and twelve years. Sex instruction, if given at all, had come from four to six years too late. Only 23 per cent had received any instruction from their parents.

On the basis of the above facts five criteria were formulated regarding organization of a sex education program:

1. Sex education should be a matter of cooperation between the home and the school.
2. Segregation of the sexes for formal instruction in teaching of human reproduction and venereal diseases is desirable.
3. The course should be voluntary in terms of pupil enrollment.
4. The method of presentation should be one of integration of materials in established courses.
5. The appropriate age levels in terms of practical situation faced by the school are between the ages of nine and fourteen.

¹⁸Frances Bruce Strain, op. cit., p. 41-42.

¹⁹M.J. Exner, The Problem of Sex Education in the Schools, Virginia State Department of Health, Richmond, Virginia, p. 2.

The Course of Study. An effective course of study in sex education should be carefully planned and organized. Alberty²⁰ says that the recognition of the problems, needs and interests of pupils are the objectives of a democratic school in everything it does . . . if the unit is expected to contribute to reflective thinking, to develop certain habits and skills, the objectives should be stated clearly. Strain states that:

Every sex education program, no matter how enlarged or restricted, can work toward certain definite objectives, which, however, must not be isolated but synthesized into an organic whole.²¹

Most educators recognize the transitional needs of adolescents. When one builds a program, certain critical points of sexual development should be kept in mind. The wide diversity of needs is difficult to handle because of the difference of backgrounds and wide variation in the onset of pubertal development and the fact that boys and girls have a differing age of sexual development. Strain says further,

Meeting this diversity of development has long been one of the major issues of junior high school education . . . In hygiene or physiology classes, the material can easily be adapted to the needs of pubescent and pre-pubescent young people . . . the approach may be on the subject of general physical maturing, sexual development, hygiene, dress, social life, recreation and good times.²²

²⁰Harold Alberty, Reorganizing the High School Curriculum, New York: The Macmillan Co., 1948, p. 279.

²¹Frances Bruce Strain, op. cit., p. 11.

²²Ibid., p. 44.

Beister²³ developed units on personal health and human relations according to this general plan:

Objectives: A few significant and obtainable objectives stated in terms of desired changes in pupil behavior.

Evaluation: Methods of evaluation are suggested which should enable the teacher and his students to ascertain whether or not they have accomplished the purposes expressed in the objectives.

Time: The time will vary, depending on the methods used in the study, the interest of the students and the amount of time available.

Teaching procedure: It is believed that each teacher will have to adapt the materials and methods to the needs of the particular group. No one knows one best way of developing an unit.

Student activities: A list of student activities pertinent to the objectives should be given. Here again the ideas are merely suggestions which may be used if needed.

Questions for discussion with answers: Each unit contains a list of significant questions for study and discussion and summary. In interest of economy the number of books has been limited to two or three for a unit. Only recent books bearing directly upon the subject matter of the unit have been selected.

Visual aids: Lists of available visual aids with descriptions and places of possible procurement are given.

²³Lillian Beister, op. cit., p. 3.

Chesser and Dawe²⁴ followed the plan below in their

course:

Anatomy and the Physiology of the Human Being

1. The skeleton
2. Muscle
3. The brain and nerves
4. The blood
5. The skin

Organs of the Thorax

1. The heart
2. The lungs

Organs of the Abdomen

1. The stomach
2. The intestines
3. The liver
4. The pancreas
5. The kidneys
6. The bladder
7. The uterus

The Study of Reproduction

A. Animals

1. Mammals

- (a) the dog
- (b) human beings

B. Flowering plants

Lester Beck's²⁵ recent book on human development entitled

Human Growth is based on the educational film²⁶ of the same title.

He arranges his course in this manner:

²⁴Eustace Chesser and Zoe Dawe, op. cit., p. 9.

²⁵Lester F. Beck, Human Growth, New York: Harcourt Brace and Company, 1949, et passim.

²⁶"Sex Education in the Oregon Schools," Life, May 24, 1948.

1. How a person grows after he is born, and how the various glands in the body effect growth and other body functions.
2. About ourselves and our cells. How boys and girls grow into men and women and become physically mature.
3. How a new life begins -- another step in the cycle of human growth.
4. The miracle of birth. How the tiny human egg grows into a baby -- and is born.

On the basis of the foregoing citations these criteria were formulated regarding the content of a course in sex education for adolescent boys and girls:

1. An effective course must be well organized and planned.
2. The objectives of the course should be stated in terms of desired changes in pupil behavior.
3. The amount of time will vary depending on interests, methods and time available.
4. Evaluation procedures should be selected on the basis of the objectives of the course.
5. Materials and methods should be adapted to the needs of the particular group.
6. All teaching ideas are merely suggestive.
7. Student activities should be pertinent to the objectives of the course.
8. The subject matter should cover these topics:
 - a. An acceptable scientific vocabulary
 - b. Problems of maturation
 - c. Knowledge of human reproduction
 - d. Personal hygiene
 - e. Boy and girl relationships
 - f. Community health problems

Qualifications of the Instructor. The American Hygiene Association²⁷ lists the following qualifications of the instructor as essential:

A pleasing personality and a sound character are absolutely essential.

A sound emotional attitude toward sex.

Recognition of a need for this type of education.

A knowledge of the physiological, biological, sociological and psychological aspects of sex.

The ability to face reality with a constructive and sympathetic attitude.

Respect for different ethical and religious views, and for changing scientific knowledge.

Strain says that:

If one could check off a list of traits one would say the ideal sex education teacher should be married, parent of two or three children, youngish, medium in height and size, a pleasing dresser, human in feeling, tolerant, understanding, emotionally adjusted and if there is to be only one leader for the whole school, one would choose a woman. Technical qualifications are more readily fulfilled. The teacher training background should include biology, child care, mental hygiene, psychology, sociology and study of the family . . . in addition a season of supervised social work.²⁸

In summarizing the qualifications of a sex education teacher the following criteria were formulated:

²⁷American Hygiene Association, "An Approach to Sex Education in the Schools," N.Y.C., 1948, p. 7.

²⁸Frances Bruce Strain, op. cit., p. 308-329, et passim.

1. Personal qualifications:

- a. The teacher must have poise and judgment
- b. The teacher must have an active sympathy with the problems and feelings of young people
- c. The teacher must be a person of character and principle

2. Academic qualifications:

- a. The teacher should have taken courses in: biology, mental hygiene, child psychology, adolescent psychology, physical education, physiology, and sociology

Creative and Recreative Pursuits. An important phase of the junior high school program for sex education is its provision for social and emotional growth. Strain²⁹ points out that social laboratories are as valuable as biological ones . . . schools should work out a program of school athletics, social functions, as well as the promotion of leisure time activities, handicraft, dramatics, clubs, orchestra and bands . . . we must provide satisfying and legitimate outlets to drain off surging young energies.

Gruenberg states:

The failure of a community to provide an adequate program of social activities for its young drives boys and girls to seek elsewhere the excitement and associations they crave . . . to offset this the school should arrange for adolescent recreation . . . today in many parts of the country, evening recreation centers are being developed in the school.³⁰

²⁹Frances Bruce Strain, op. cit., Chapter VIII.

³⁰Benjamin Gruenbert, op. cit., p. 10-11.

On the basis of the above discussions, the following criteria were formulated regarding creative and recreative pursuits:

1. All students should participate in recreative and social affairs.
2. Children should be given instruction in manners, etiquette, etc.
3. The school should provide for leisure time activities.

Counseling Facilities. One of the greatest services a sex education program can offer is a counseling center, where parents, students and teachers can go to work out individual problems.

Without a private space for work and time allotted for interviewing and counseling, the teacher of the course in sex education does not have an opportunity to talk over special emotional and social problems that are too intimate to enter upon in open discussion. On such occasions guidance services in a school can play an important part in a sex education program. Jones³¹ states that satisfactory interviewing and counseling cannot take place where there are constant interruptions and distractions. The amount of time to be allotted for interviewing and counseling cannot be accurately measured in terms of hours and minutes. Erickson³² suggests:

Two hours of counselling per counselee is a fairly adequate program to get started. More or less can be allotted in accordance with the value of the time used.

³¹Arthur Jones, Principles of Guidance, New York: McGraw-Hill, 1934, p. 273.

³²Clifford E. Erickson, A Practical Handbook for School Counselors, New York: The Ronald Press Co., 1949, p. 184.

The librarian is among the most important members of a school staff, although she may have no teaching duties at all. It is her duty to make the library an interesting place to all who seek answers to their problems. Erickson says that:

The guidance program that is effective must center much of its attention upon printed materials . . . thought must be given to the arrangement of these materials for reading reference.³³

The classroom teacher occupies a strategic position in the guidance program. Everyday opportunities present themselves for the teacher to assist in the overall guidance service. Erickson and Smith state that the teacher through her daily contacts can contribute more than any other member of the school to the appreciation of the student for guidance.³⁴

The head of the counseling program shares the responsibility with other members of the staff. Erickson and Smith³⁵ state that:

The head counselor is the co-ordinator of guidance services and should be prepared to counsel with special cases and assist other staff members in carrying out the whole program . . . another important function is to systematically follow up former counselees . . . last, but not least, "the primary duty of such counselors will be that of collecting and interpreting data about, and to the individual.

³³Clifford E. Erickson, A Basic Text for Guidance Workers, New York: The Ronald Press Co., p. 520.

³⁴David C. Pulley (unpublished thesis: A Survey and Appraisal of Guidance Services in the High Schools of Virginia, 1948-49), p. 40.

³⁵Erickson and Smith, op. cit., p. 64.

On the basis of the foregoing presentation, these criteria were set up regarding counseling facilities as related to the sex education program:

1. There must be space and time allotted to counseling outside the classroom.
2. The librarian, classroom teacher, and head counselor should make guidance a cooperative endeavor.
3. The head counselor should help pupils to solve personal problems.
4. The head counselor performs follow-up functions.

Evaluation. According to Remmers and Gage there are three reasons for evaluation of a course:

- (1) Evaluation is needed to discover difficulties and weaknesses so that modifications and revisions may be made.
- (2) Evaluation is necessary to find out if the objectives of the course have been met.
- (3) Evaluation is necessary before the results can be reported accurately and impartially. Only this way may research be justified.³⁶

Tyler especially has emphasized the need of evaluation . . . through co-operative attack by teachers, parents, librarians and other persons concerned with pupils.³⁷ Beister³⁸ states "Evaluation procedure should enable the teacher and pupils to ascertain whether or not they have achieved the objectives of the course."

³⁶H.H. Remmers and N.L. Gage, Educational Measurement, New York: Harpers and Brothers, 1943, p. 4-5.

³⁷Ibid., p. 5.

³⁸Lillian Beister, op. cit., p. 69.

Objective tests, including a pre-test and a post-test technique, help the teacher and class to determine whether they have achieved knowledge and skills as expressed in most objectives. The remaining objectives pertain to attitudes and appreciations. They can best be evaluated by techniques other than pencil and paper tests.

The pre-test post-test technique was popularized by H.C. Morrison.³⁹ As the term indicates, the status of the class prior to the initiation of a course or unit is investigated. The purposes are, to give the teacher insight into needs, abilities, interests, and differences within the class group. It does lend itself to controlled observation. While this is limited to gaining information in a local area, such as a particular class, it is not nearly as much used as other techniques. Burton⁴⁰ says, ideally, no assignment should ever be made without pre-testing.

The anecdotal record of responses and attitudes of students may be one way of measuring attitudes and appreciations. A culminating activity worked out by the students may be used. Examples of culminating activities are: panel discussions, a notebook, a chart or written reactions about the course.

³⁹ H.C. Morrison, Practice of Teaching in the Secondary School, Chicago: University of Chicago Press, 1941.

⁴⁰ William H. Burton, The Guidance of Learning Habits, 1944, p. 316. New York: D. Appleton-Century Co., 1944.

From the above observations on evaluation these criteria were formulated:

1. Teacher evaluation of the course is necessary to discover difficulties in the course and to make revisions.
2. Pupil evaluation is necessary to determine if the objectives of the course were met.
3. These evaluation instruments should be used:

Essay tests

Objective tests

Pre-test post-tests

Anecdotal records

Culminating activity

Positive and negative evidence regarding pupil behavior, submitted by any member of the school or community.

CHAPTER V

THE APPRAISAL OF THE COURSE

The purpose of this chapter was to appraise the course of study in sex education as described in Chapter III. The appraisal was made in the light of the criteria selected, validated and described in Chapter IV.

The criteria were drawn from seven categories suggestive of an adequate sex education program. In many instances each category was sub-divided into more detailed measures as detailed below. In care of each criterion, effort was made to establish its validity by logic and documentation.

The appraisal of this course should designate whether or not this course of study is a reasonably adequate program in sex education for this particular school.

Criterion I - School and Community Support.

An effective sex education program should have the backing of everyone in the community:
(1) the parents, (2) the school administration,
(3) the teaching staff, (4) civic organizations,
and (5) newspapers.

The sex education program at Albert H. Hill School was sponsored by the P.T.A.¹ at its inception. Parents, administration,

¹Recorded in minutes of P.T.A., op. cit., Chapter III.

and teaching staff showed their sincere interest and intense loyalty to the program when the local newspaper printed a story about giving a vocabulary test in an unsegregated group.² If these elements, parents, teachers, and administration, who comprise the community, had not been so staunch in their belief in the program, it could have come to an early end. The newspaper tried to be objective about the undertaking, and the writer believes the publicity did more good than harm. After the publicity, other schools inquired about our course of study. The writer appeared before several parents' groups to tell about the program and had very sympathetic audiences.³

There are limitations concerning the backing of the program by civic organizations, since it has not been necessary to seek their approval or backing, but many of the parents in this community probably belong to many of these organizations and would lend influence if approval of civil leaders had been needed.

In light of Criterion I, the course of study meets four of the five sub-divisions in this category.

Criterion II - Selected Matters of Organization

- (1) Sex education should be a matter of cooperation between the home and the school.
- (2) Segregation of the sexes is desirable.
- (3) The course should be voluntary in terms of pupil enrollment.
- (4) Sex education in a junior high school program should be incorporated in established courses.
- (5) The appropriate age levels, in terms of the practical situation faced by the schools, are between the ages of nine and fourteen.

²See Appendix A, p. 70.

³Ibid., p. 88.

The writer has consistently followed the practice of meeting the seventh grade parents at the beginning of each school year. On such occasions she explained the sex education course briefly to them and asked their cooperation at home.

As a whole, the plan works well. Most parents are grateful to have the schools take the responsibility off their hands. In the cases of those who are willing to accept the responsibility of giving home instruction, they are generally willing to have the school supplement it. It is the opinion of the writer that this practice makes for better understanding and closer cooperation between the home and school. It gives the uninformed parent an opportunity to learn more about the part that sex education plays in helping boys and girls to solve their social and personal problems.

Segregation is not only desirable when human reproduction and venereal diseases are being studied, but it is approved by the staff and also is strongly recommended by the subcommittee⁴ on sex education in the Richmond Public Schools. This is sufficient reason for the practice of segregation in this particular school.

Sex education is part of the general science class and is a required one, though it may be omitted provided the parent requests it of the principal. At no time has the principal been

⁴See Appendix A

requested by a parent to excuse or exclude a pupil from the class. The seventh grade counselor⁵ often has requests from parents to have late entrants in more advanced grades admitted to 7L general science. This request is usually granted provided the class in sex education is not too large to accomodate additions.

The method used in the presentation of material is one of integration. Sex education is included in the general science course. Sex concepts are learned gradually through the study of lower animals and plants before considering human reproduction.

According to Exner's⁶ study, the optimum time for sex education is between the ages of ten and twelve years, but others say that for practical purposes it has been studied later. Strain⁷ recommends the junior high school age as a good starting point. The investigator finds that the course in sex education at Albert Hill meets this stipulation regarding age level, since seventh grade is the beginning of junior high school.

Considering the facts in light of Criterion II, the matters of selected organization are not entirely met in the course on sex education; sub-item three as stated is not met.

⁵ See Appendix A, p. 72.

⁶ Cf. ante Chapter IV.

⁷ Ibid.

Criterion III - The Content, Materials, and Procedures
in the course

(1) An effective course in sex education must be well organized and planned. (2) The objectives of the course should be stated in terms of desired changes in pupil behavior. (3) The amount of time will vary depending on interests, methods and time available. (4) Evaluation procedures should be selected on the basis of the objectives of the course. (5) Materials and methods should be adapted to the needs of the particular group. (6) All teaching ideas are merely suggestive. (7) Student activities should be pertinent to the objectives of the course. (8) The subject matter should cover these topics: An acceptable scientific vocabulary; problems of maturation; knowledge of human reproduction; personal hygiene; boy and girl relationships.

As evidence of effective planning and organization of the course of study in sex education as described in Chapter III, the writer offers the following:

1. Securing the sponsorship of the P.T.A.⁸ and the approval of the school administration before initiating the course.
2. Gaining permission from the principal to include sex education in the general science class.
3. Giving a pre-test⁹ to diagnose weaknesses and to discover pupils' needs.
4. Using an evolutionary approach to the study of human reproduction.
5. Planning work¹⁰ to be done in library by the segregated group under supervision of the librarian.
6. Ordering appropriate films to arrive when most useful in the course.

⁸Cf. ante Chapter III.

⁹See Appendix B

¹⁰Cf. ante Chapter III

7. Collecting suitable books and materials that are pertinent to the course.

The objectives of the course are stated in terms of desired changes in pupil behavior. These objectives are expressed in terms of (1) Attitudes and Appreciations, (2) Knowledge and Understanding, and (3) Skills and Abilities. The objectives¹¹ are set forth in more detail in Chapter III. According to authority they cover adequately the desired changes in behavior in relation to sex education.

Since there is no general agreement on the amount of time required by a course, the writer feels that the time allotted her has never been sufficient to do what should be done. The class period is 50 minutes long. By the time library passes are given to the segregated group, and the class group is ready to settle down, a quarter of the period has been used. The segregated group is sent from the library a few minutes before the end of the period, which shortens the period still more, when they interrupt by returning. This may be the weak spot in the course. The time allotted is determined by the schedule set up by the principal, but probably the teacher should try to discover the reason for this limitation. The writer feels that this item of time needs to be studied in relation to possible changes of procedures.

¹¹Greba T. Logan, "Human Growth and Development," A Junior Senior High School Unit, Portland Public Schools, Portland, Oregon, pp. 4-5.

Evaluation was continuous, and the instruments used were varied to make it possible to measure the different kinds of behavior included in the objectives. In the area of attitudes and appreciations, there are no satisfactory paper and pencil tests. Here the writer offers evidence¹² secured as a result of observations made by the counselor at Albert H. Hill School, and from the senior high school science department¹³ regarding children who had taken the sex education course at Albert H. Hill School.

Behavior changes in the field of knowledge and understandings are more easily measured by paper and pencil tests than are attitudes and appreciations. Tests given the pupils during the course may be seen in Appendix B.

The ability to use correct sex terminology was measured by means of the post-test,¹⁴ and was observable in a culminating activity in the form of a notebook on the systems of the human body. Skill in the manipulation of materials was demonstratedⁿ by the pupils when they used the microscope, assembled the anatomical figure, arranged in evolutionary order the preserved specimens, selected pictures from the file on reproduction, and collected materials to

¹²See Appendix A

¹³See Appendix A

¹⁴See Appendix B

be used in class and notebook.

Day by day evaluation has been made of all discussions to enable the pupil to move nearer the realization of the primary goal -- a scientific and healthy-minded attitude toward the biological function of reproduction and sex education generally.

The wide range of abilities in this group, where the I.Q.'s ranged from 70 to 110 on the Pintner scale, made it necessary to choose materials from many sources in order to provide for individual differences. These materials were:

1. Newspapers, magazines, posters, and radio.
2. Live material such as microscopic life, the aquarium with fish, snails, frog eggs that developed into frogs, box turtles, insects, and flowering plants.
3. Textbooks representing different reading levels.
4. Non-living materials, such as films, preserved specimens, slides, recordings, skeletons and models.

The pupils brought in many examples of reproduction and it was sometimes a problem to find living quarters for them.

The fact that all teaching ideas should be merely suggestive is in agreement with the writer's philosophy of teaching. The course should be planned to meet changing needs and interests of the group. The field is too broad to confine procedure to one set pattern. The writer attempts to keep in mind that life about the pupil is the most natural approach to learning. This idea is in keeping with the writer's approach.¹⁵

¹⁵Cf. ante Chapter III.

Student activities should be pertinent to the objectives of the course is a fact that no one will dispute, however, the activities of a course, to some extent, must be determined by the materials at hand, and the abilities of the group to use them.

The writer is of the opinion that such activities as using selected textbooks in the classroom and in the library, and visual aids, to find the answers to questions that are asked, is an example of "seeking information from the proper authorities".¹⁶ This is one of the important objectives in the course. Other activities such as seeing films about reproduction help the boys and girls "gain accurate information regarding the process of human reproduction, growth and development".¹⁷ The showing of the movies, The Story of Menstruation, and Personal Hygiene for Young Men, was a means of teaching boys and girls that there are "physical differences between the sexes, and that these differences are for the perpetuation of the species".¹⁸

The discussion periods provided opportunities for the pupil to use his new vocabulary, and afforded practice in pronunciation and enunciation of the "scientific names for the parts of the body and its processes".¹⁹

The culminating activity in the form of a notebook was an

¹⁶ Cf. ante Chapter III.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

activity that required skill in writing, in drawing, in planning, and in using materials; another objective of the course.

Thus it appears that this portion of the course of study compares favorably with sub-item 7 of Criterion III.

The subject matter²⁰ of the course described in Chapter III is in substance in accord with Criterion III, sub-item 8. Both the criterion and the course of study include such topics as scientific vocabulary, problems of adolescence (or maturation), knowledge of human reproduction, and boy and girl relationships. The writer lists creative and recreative pursuits, while the criterion suggests community problems, and personal hygiene. While the writer did not list the last two mentioned topics, she provides for these under the head of problems of adolescence in showing films on personal hygiene.²¹ The topic community problems has been provided for in the study of communicable diseases, as mentioned in Chapter III. The writer interprets community problems to be problems that are the outgrowth of some sex problem. This is taken care of in discussion when groups are segregated, while venereal diseases, problems of petting, and standards of social conduct are being considered.

In conclusion, it may be said that Criterion III is met in general except under sub-item 3. The writer finds that the amount of time allotted the course is not sufficient to do justice to

²⁰Cf. ante Chapter III.

²¹Supra.

everyone in the course. Relative to sub-item 4, the writer feels that the means of evaluating attitudes and appreciations is limited. There are not enough opportunities to study and evaluate every pupil. The class of 32 was too large and the range of abilities so wide that there was not enough time to help each child solve his individual problems.

Criterion IV - Qualifications of the Teacher

- (1) The personal qualifications of the teacher should be (a) the teacher must have poise and judgment; (b) the teacher must have an active sympathy with problems and feelings of young people; (c) the teacher must be a person of character and principle.
- (2) Academic qualifications
(a) The teacher should have taken courses in: biology, mental hygiene, child psychology, adolescent psychology, physical education, psychology and sociology.

In the matter of appraising the qualifications of the instructor it is difficult to be objective in terms of the mere subject aspects since the writer and the instructor of the course are the same person. However, the instructor feels she has been imperturbable in face of any question asked by the pupil in regard to sex. Whether this may be called poise is debatable, but the writer offers it for what it is worth. The fact that the sex education course stood the fire of criticism and is accepted as any other course in the curriculum is evidence that the community has faith in the instructor and believes she possesses the character traits necessary

to teach a program that is not understood or accepted in all the schools of the particular school system involved.

The fact that the writer chose to teach adolescent children who have many problems, at this transitional period in their lives, is mute evidence that she is sympathetic to their needs and problems. As to academic qualifications the writer submits a summary of her official record.²² The record reveals that courses have been completed as follows:

Undergraduate Courses

Hygiene (West Law requirement)
 Child psychology
 Educational psychology
 Elementary zoology and laboratory
 Elementary botany and laboratory
 Genetics
 Evolution
 Sociology

Graduate Courses

Genetics
 Problems in biology (class course)
 Aquatic biology and conservation
 Problems in biology (research)
 Mental hygiene
 Diagnosing and Counseling

The requirements of Criterion IV are met within the limitations of logic and documentary evidence, offered in support of the instructor's qualifications.

Criterion V - Creative and Recreative Pursuits

- (1) All pupils should participate in recreative and social affairs.
- (2) Children should be given instruction in manners, etiquette, etc.

²²Registrar's office, College of William and Mary.

- (3) The school should provide for leisure time activities.

Albert Hill Junior High School provides for creative and recreative pursuits to a limited extent. Courses in art, crafts, shop, choral music, and household arts and good grooming, are given as exploratory courses in the seventh grade, each class lasting four weeks. During these short periods boys and girls become better acquainted with each other, which helps to develop better girl-boy relations. Becoming acquainted with these different courses helps the child to explore his potentialities and develop along the lines of his own characteristic pattern, with satisfying and acceptable outlets for his energies.

Physical education offers means of recreation outside the school in the playing of tennis, social dancing and interests in sports. During the school year the boys and girls initiate, prepare and participate in parties in the gymnasium under the sponsorship of the faculty and parents. Here the pupils put into practice the etiquette and manners they studied about in the good-grooming class. Many pupils have their first dates at these parties that last from three to five in the afternoon. These gatherings offer the writer an opportunity to observe attitudes of the pupils in her classes toward each other. They have an opportunity to associate with each other and to be natural in their relationship with both sexes. In view of Criterion V, the program of sex education meets generally

the requirements of sub-items two and three in the category Creative and Recreative Pursuits, but does not meet sub-item one in respect to participation in social affairs. All students do not participate in recreative and social affairs. Too often it is the little "clique" in a homeroom that is invited, and many times the quiet and unattractive child feels left out of things. There is need for a study of how to bring more children into the social affairs.

Criterion VI - Counseling Facilities

- (1) There must be space and time allotted to counseling outside the classroom.
- (2) The librarian, classroom teacher and head counselor should make guidance a cooperative endeavor.
- (3) The head counselor should help pupils solve sex problems.
- (4) The head counselor performs follow-up activities.

There are two full-time counselors at Albert H. Hill School, with a population of about 400 pupils. One counselor takes care of seventh grade pupils, and the other is counselor in the eighth grade. This requirement is met in the matter of time, but due to the crowded conditions in this particular school, there is no room set aside for counseling. The counselor has to find any available space to hold interviews. This is a decided disadvantage to the pupil who needs a place to go to seek help on personal problems. The homeroom teacher, the librarian and counselor work

together in most cases. There are a few exceptions where homeroom teachers prefer to counsel their homeroom pupils instead of asking help from the head counselor.

The head counselor does a very creditable job when she has opportunity to work with a pupil who is in need of counseling and personal guidance. Many problems with sex implications have been followed up to a happy ending through her skill and patience.

In light of Criterion VI, the writer is aware of the fact that there are some features in the guidance program at Albert Hill that need to be changed. The matters of space, and cooperation with the guidance leader on the part of all homeroom teachers are matters to be improved at the earliest moment. Therefore, on the basis of the foregoing presentation parts of sub-items one and two under Criterion VI have not been met.

Criterion VII - Evaluation of the Course in Sex Education.

- (1) Evaluation of the course in sex education is necessary to discover difficulties and to make revisions.
- (2) Pupil evaluation is necessary to determine if the objectives of the course are met.
- (3) The evaluation instruments should be: essay tests, objective tests, anecdotal records, culminating activities, and positive and negative evidence regarding pupil behavior submitted by any member of the school or community.

The teacher welcomes the opportunity to evaluate the

course. At such time she is able to discover difficulties and to make revisions. Evaluation procedures made to determine how well the objectives are met by the pupils is one method of finding out some of the difficulties encountered by the teacher and pupil. The writer proposes to use the results of this appraisal to revise the course developed for junior high school. She plans to make modifications where it is necessary to improve instruction. The fact that tests set up in terms of the objectives of the course are used indicates the intention of the writer to evaluate the pupil's behavior in light of the objectives.

The instruments²³ employed in the pupil evaluation were the multiple choice test, the situation test, and the pre-test post-test. The pre-test and post-test on sex vocabulary resulted in the following statistics:

	Pre-test	Post-test
Mean	4.47	13.59
Standard Deviation	1.90	3.91
Difference between the means		9.12

When the critical ratio technique was applied a critical ratio of 11.69 was obtained. This indicated that the difference between the mean scores on the pre-test post-test was significant at a one degree level.

The following is a summary of the gains made in terms of

²³See Appendix B

changed behavior when evaluated in light of the objectives in the course:

1. The students' acceptance of correct terminology.
2. Knowledge of the physical changes that occur in the body.
3. A gain in knowledge of the structure and function of the human body.
4. An increase in accurate information regarding human reproduction.
5. Selects his information from scientifically approved sources.
6. A change in the pupil's attitude from one of reticence to active participation in class discussion of problems of human growth and development.
7. The statement from children of their ability to talk freely with parents without emotion or embarrassment about the question of sex after having had the class in sex education.
8. Participation in social activities with mixed groups.

Positive and negative evidence regarding behavior was submitted by the counselor,²⁴ as a means of evaluating that area of behavior that does not lend itself to more objective means of evaluation.

Considering these facts, as viewed in the light of Criterion VI, the evaluation of the course by the teacher does not meet entirely the requirement set up in this criterion. There should be teacher evaluation of the course more often than this appraisal has shown. In view of this fact, sub-item one was not fully met in Criterion VI.

²⁴See Appendix A

CHAPTER VI

SUMMARY OF FINDINGS AND RECOMMENDATIONS

Summary. In this study seven general categories relating to sex education for junior high school pupils have been appraised in light of criteria based on the literature written by authorities in the field of public health, psychology, education and sex education. From the seven general categories, twenty-six specific criteria were drawn in order to appraise specific practices relating to the sex education program at Albert H. Hill Junior High School.

In view of the results of the findings, the sex education program involved seems to be reasonably well established in terms of nineteen criteria but should be improved in seven of the criteria.

The practices involved in the sex education program at this particular school which meet the specifications in the stated criteria are:

1. The sex education has the support of the community.
2. The home and the school cooperate in the matter of sex education.
3. There is segregation of the sexes during the teaching of human reproduction and personal hygiene.
4. Sex education is included in the general science class which is an established course.
5. Sex education is given to boys and girls between the ages of nine and fourteen.
6. The sex education course is well organized and planned, generally.
7. The objectives of the course are stated in terms of desired changes in pupil behavior.

8. Materials and methods are adapted to the needs of the particular group.
9. All teaching ideas are merely suggestive.
10. Student activities are pertinent to the objectives of the course.
11. The subject matter covered these topics:
 - (a) An acceptable scientific vocabulary
 - (b) Problems of maturation
 - (c) Knowledge of human reproduction
 - (d) Personal hygiene
 - (e) Boy and girl relationships
 - (f) Community health problems.
12. The teacher meets the personal and academic qualifications within the limitations of logic and documentary evidence.
13. The pupils are given instruction in etiquette, manners, etc.
14. The school provides for leisure time activities.
15. The head counselor helps the boys and girls in seventh grade solve their problems.
16. The same counselor performs follow-up functions.
17. Pupil evaluation was made to determine if the objectives of the course were met.
18. The evaluation instruments were paper and pencil tests which included the pre-test post-test, a culminating activity in the form of a notebook, and evidences gained through observations by the members of the teaching staff.

The practices in which the sex education program did not meet the specifications as stipulated in the criteria are:

1. The course should be voluntary in terms of pupil enrollment.
2. The time allotted to sex education at Albert H. Hill School is not sufficient to make possible fully satisfactory achievement of the objectives of the course.
3. Evaluation procedures should be selected carefully on the basis of the objectives of the course.

4. It should be made practicable for all children to participate in recreative and social affairs.
5. There should be space allotted outside the classrooms for counseling purposes.
6. The librarian, classroom teacher, and head counselor should make sex guidance a cooperative endeavor.
7. More adequate teacher evaluation of the course is necessary to discover difficulties and make revisions.

Recommendations. In view of the above summary the following recommendations are made concerning the sex education program at Albert H. Hill Junior High School:

1. It is recommended that the course be voluntary in terms of pupil enrollment unless the parent can present very adequate reasons for its omission.
2. It is recommended that the instructor plan the work in the general science class so that enough time is allotted to the study of the human body to cover the subject matter in a more thorough manner.
3. It is recommended that classes should be smaller in order to have an opportunity to study the individual child and his needs. Evaluation procedures cannot be selected on the basis of the objectives of the course to meet the needs of groups of boys and girls whose abilities have so great a range as was the case in the experimental group.
4. It is recommended that all children should be given an equal opportunity to participate in recreative and social affairs, and that special effort be made to include the more timid and less sophisticated boys and girls in the planning of social events at school.
5. It is recommended that space be allotted the counselor outside the classroom, preferably a cheerful but secluded room, not subject to interruptions and distractions.
6. It is recommended that all teachers and counselors work together, and where disciplinary action is indicated, the counselor's recommendation should be considered.
7. It is recommended that the teacher evaluate the course frequently and regularly to discover difficulties in the course and make revisions.

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APPENDIX A - LETTERS AND REPORTS

Report of the Sub-Committee on Sex Education

The sub-committee on sex education appointed by Mr. Norris,¹ met at John Marshall High School, April 10, 1944, Mr. Galvin² presiding. The committee submits the following report in the form of suggestions for the consideration of the general committee:

A recommendation that sex education in the junior high schools be taught as an integral part of some subject field which will reach a great number of children. That this field be preferably that of science or hygiene.

- a) That instruction be based upon psychological, sociological, personality and health phases. That it should not be in the method of preaching, nor should it be highly emotionalized.
- b) That instruction should consist of definite, carefully planned, comprehensive units of instruction.
- c) That there should be no separation of boys and girls, except where the instruction deals with human reproduction and venereal diseases.
- d) That teachers use all available material and every opportunity to answer questions honestly and frankly, paying especial attention to the development of desirable attitudes and understandings.

1. Mr. Forbes Norris was assistant superintendent of schools prior to Mr. Willet being made superintendent in 1946.

2. Mr. W. R. Galvin was assistant principal to Thomas Jefferson High School. He is now principal at Westhampton Junior High School.

RICHMOND, PUBLIC SCHOOLS

ADMINISTRATION BUILDING, 312 N. NINTH STREET
RICHMOND 19, VIRGINIA

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H. I. WILLETT
SUPERINTENDENT OF SCHOOLS

August 7, 1950

Mrs. Sue Booker Christian
Box 1238
Williamsburg, Virginia


Dear Mrs. Christian:

I understand that you are doing a special project at the College of William and Mary in which you are attempting to evaluate that part of your science course which has dealt with certain aspects of sex education.

I wish to indicate that I am glad you are giving special attention to this subject - I have understood that your work at the Albert H. Hill School has been outstanding in this field.

I have been particularly interested in the way in which you have brought parents to an understanding of your purposes, and they seem to have been quite enthusiastic over the natural and normal manner in which you have been able to handle a difficult subject for this age group. It is a subject that requires a great deal of tact and understanding to achieve desirable goals, and you seem to have been able to do this with both your pupils and your parents.

Very sincerely yours,



Superintendent

ALBERT H. HILL SCHOOL
3400 PATTERSON AVENUE
RICHMOND 21, VA.

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W. D. ELLIS, PRINCIPAL

August 1, 1950

My dear Mrs. Christian:

I am writing you about the course in General Science, including the unit in Sex-Education, which you have taught in Albert Hill Junior High School for several years. This course was offered first to those pupils in the eighth grade who elected it. At the request of the Parent-Teachers Association it was made a required course instead of an elective and was given in the seventh grade in order that pupils might have it one year earlier.

The good results have been evident to the teaching staff in this school and to all who have had opportunity to observe them, as well as to the parents of the pupils, year after year. It is no longer thought of as unusual or "experimental". It is approved and appreciated.

Sincerely yours,

W. D. Ellis,
Principal.

3400 Park Avenue
Richmond, Virginia
July 29, 1949

Dear Mrs. Christian:

Sorry to be so long getting this information to you. The P-T.A. at Albert Hill requested a course in sex education be given to all junior high school pupils in the seventh grade instead of the eighth grade. This was in April, 1946, to be done the next fall. I was president at the time. Mrs. Wells became president in the fall. If you want a formal statement, I will write it out at length. Don't work too hard and come to see us.

Love,

Ruth W. Beazley
(Mrs.) Sandford Beazley.

4212 West Franklin Street
Richmond, 21, Virginia,
August 18, 1949.

Dear Sue,

In answer to your request for a statement of my opinion as to the value of the classes in sex education in Albert Hill School, I submit the following which to me include both negative and positive evidences of value to the students, the parents, and the school community:

1. The absence of obscene language on the walls of both the boys and girls lavatories;
2. The absence of obscene language and disfigurement of illustrations in library and text books;
3. The many expressions of appreciation from parents for what the class has meant to them and to their children;
4. The requests from parents to have late entrants in more advanced grades admitted to the 7L Science class;
5. The students acceptance and use of correct terminology;
6. The statements from children of their ability to talk freely with parents without emotion or embarrassment about question of sex after having the class in sex education;
7. The acceptance on the part of both sexes of the scanty clothing worn in mixed gym classes;
8. The change in children's attitude from one of reticence to active participation in class discussion in science class and in other classes where phases or implications of sex arose, resulting in a more wholesome pupil-teacher relationship;

9. The minimum number of sex problems in a student body of approximately 400 junior high school pupils.

When I spoke with Mr. Ellis about your request, he stated that you could get innumerable favorable statements from parents if you elected to contact them.

I feel it is impossible to state all the benefits which will accrue as each child matures, broadens his social contacts, and is confronted with new situations. Many of the benefits may never be known except to the individual.

Sincerely,

Mary Strange Jones.

THOMAS JEFFERSON HIGH SCHOOL
Grace and Malvern Streets
Richmond, Va.

August 18, 1949

To Whom It May Concern:

It has been observed by several teachers, including myself, superior attitudes and behavior patterns in adjustment to the sex hygiene phase of the high school biology classes by students who have had previous scientific training. This has been noticeable of the students who have had the science courses offered at Albert H. Hill Jr. High School under the capable direction of Mrs. Sue B. Christian.

Respectfully,

Ariana Amonette Saunders.

APPENDIX B - TESTS AND TEST RESULTS

MULTIPLE CHOICE TEST

Directions: For each question choose the one statement which you think is correct. Write the letter that precedes that statement in the blank space at the right.

1. An egg is fertilized when it unites with
 - a. a gene; b. a sperm; c. another egg. _____
2. The organ of the animal or human being in which the eggs are produced is called the
 - a. testes; b. uterus; c. ovary. _____
3. The egg is
 - a. Smaller than the sperm; b. larger than the sperm; c. about the same size. _____
4. A fertilized egg cell grows by
 - a. gradual expansion; b. dividing into more cells; c. uniting with other cells. _____
5. In the human mother the egg passes from the ovary into the
 - a. vagina; b. uterine tube; c. uterus _____
6. In the human mother, if the egg is not fertilized, it
 - a. passes out of the body through the vagina; b. is absorbed by the blood; c. is stored in the uterus. _____
7. In the human father sperms are produced in the
 - a. testes; b. seminal vesicles; c. prostate gland _____

8. The process by which the uterus gets rid of its special lining and blood supply is

- a. fertilization; b. pregnancy; c. menstruation
-

9. The human embryo gets its food through the

- a. placenta; b. uterine tube; c. cell division
-

10. The umbilical cord connects the

- a. testes and seminal vesicles; b. placenta and naval; c. uterus and placenta
-

11. The human fetus grows within the mother's body for a period of about

- a. seven months; b. twelve months; c. nine months
-

12. When it is time for the baby to be born the

- a. muscles of the uterus contract to force out the fetus; b. the naval gradually opens to let out the fetus; c. the uterine tube expands to permit the fetus to pass through
-

13. The factor which makes each living thing produce other living things of the same kind is the

- a. chromosomes; b. gene; c. blood type
-

14. One characteristic which is hereditary is

- a. color of hair; b. birth marks; c. tuberculosis
-

15. Menstruation usually begins between the ages of
 a. 15 and 18 years; b. 12 and 15 years; 9 and 11
 years _____
16. Menstruation occurs about once in
 a. 28 days; b. 35 days; c. 20 days _____
17. Seminal emissions are
 a. a sign that a boy is having improper thoughts;
 b. due to lack of self-control; c. a normal occurrence _____
18. Masturbation
 a. sometimes causes insanity; b. is a good way of
 taking care of sex tensions; c. is not physically harmful _____
19. A general principle of life is
 a. all forms of life, except one-celled animals,
 begin when a sperm unites with an egg; b. most animals and plants
 but not all, are made up of cells; c. some, but not all, plants
 and animals produce their own kind _____

KEY TO MULTIPLE CHOICE TEST

- | | | | | |
|-------|-------|--------|--------|--------|
| 1. b. | 5. b. | 9. a. | 13. b. | 17. c. |
| 2. c. | 6. a. | 10. b. | 14. a. | 18. b. |
| 3. a. | 7. a. | 11. c. | 15. b. | |
| 4. b. | 8. c. | 12. a. | 16. a. | |

SITUATION TEST ON ADOLESCENCE

Directions: On the answer sheet write Yes or No for each question and give the reason for your answer. The reason must be a fact or principle, not just a personal opinion.

1. A healthy fifteen-year-old girl has not begun to menstruate or to show other signs of physical maturity. Is she abnormal?
2. The parents of a fourteen-year-old boy observe that he acts queerly at times. They know that he masturbates and wonder if this masturbation may be inducing insanity. Can masturbation cause insanity?
3. A girl, eleven years old, is somewhat taller than the other girls in her class. She thinks that in three or four years the other girls may be as tall as she is. Is that possible?
4. The parents of a high school girl observe that she has recently become very critical of everything in the home. The parents are not especially unhappy about it because they think that a critical attitude often accompanies adolescent development. Are the parents correct?
5. Jean is 15 years old. Henry is the same age. Jean's mother wants her to invite Henry to the picnic with her family, but Jean prefers to invite George, who is 18 years old. Is Jean's reaction to these boys normal?
6. A high school girl is annoyed because she dreams frequently of being embraced and kissed by a boy whom she has never met. A friend in whom she confides suggests that the girl join a skating club of boys and girls. Is this good advice to give to a girl who is having erotic dreams?
7. A fifteen-year-old girl uses cosmetics in such a way that her mother says she looks attractive; her girl friends say she ~~she~~ looks colorless. Is it likely that the girl will value her mother's opinion more highly than the opinion of her girl friends?
8. A boy in junior high school, who is smaller than the other boys in his class, does not participate in athletic games because he is self-conscious about his small size. He satisfies his desire to excel in sports by imagining himself in situations where he is admired and is able to do things that other boys cannot do. Could there be any unfavorable effect on the boy from this kind of adjustment?

KEY TO SITUATION TEST

1. No. Signs of physical maturity and menstruation normally begin between the ages of 11 and 15. However, they may begin early as the age of 10 or as late as 17 without being considered abnormal.

2. No. There is no scientific evidence that masturbation causes insanity.

3. Yes. This girl may have matured early. The other girls in the class may become as tall as she when they mature?

4. Yes. A critical and antagonistic attitude toward the parents and the home occurs in adolescence with sufficient frequency to be considered typical.

5. Yes. Girls usually mature one or two years earlier than boys, and for that reason girls usually prefer boys who are somewhat older than they.

6. Yes. One of the best ways of overcoming sex dreams is to engage in active sports with groups composed of both sexes.

7. No. At the age of fifteen a girl usually regards the opinions of her friends much more highly than those of her mother.

8. Yes. If he carries his imagining to an extreme, he may develop the habit of living in a world of fantasy instead of living a normal social life.

Name _____ Period _____ Home Room _____

Age _____ Church Affiliation _____ Grade _____

In as few words as possible, give a definition for each of the following terms. If you do not know the meaning of the term, omit that term and go on to the next.

FEMALE

SEX

URINE

PENIS

ERECTION

SPERM

INTERCOURSE

OVARIES

VAGINA

EMISSIONS

ABORTION

CONCEPTION

SEMEN

CONTRACEPTIVE

MENSTRUATION

PROSTITUTION

URINATE

LABOR PAINS

OVUM

TESTES

A Pre-test and Post-test Study of a Sex Education Vocabulary in
Junior High School

The purposes of this study are (1) to discover areas in which the pupil needs specific direction, and (2) to find out how much factual knowledge was gained in these areas during a six-weeks period of training.

Setting. This study was conducted in a seventh grade general science class. There were 32 pupils whose ages ranged from twelve to sixteen years of age. Their I.Q.'s on the Pintner Scale ranged from 70 to 110.

The Method. The data were secured by means of a vocabulary test, consisting of twenty words¹ about the human body, and on human reproduction. This work extended over a period of six weeks, during the fall semester of 1946. The word test, as a pre-test, was given at the beginning of the course in sex education. The same test which will be designated as post-test was given the second time at the end of the course in sex education. Both tests were given by the same teacher in general science. In administering the tests, the examiner explained the purposes of the study and emphasized that the results would not be used for marks on report cards. The pupils were instructed not to guess at the answers, and while signatures

¹See Appendix R, p. 81.

TABLE I
FREQUENCY DISTRIBUTION OF PRE-TEST AND POST-TEST SCORES

Scores	Pre-Test	Post-Test
20		3
19		0
18		2
17		1
16		2
15		7
14		1
13		5
12		3
11		3
10	1	1
9	0	2
8	2	1
7	1	0
6	2	0
5	8	0
4	10	1
3	4	0
2	2	0
1	2	0
Total Number	32	32
Mean	4.32	13.59
Standard Deviation	1.90	3.91
Difference between the means		9.12

were asked of the pupils, the answer sheets would be treated with confidence. Scores on the pre-test were computed on the basis of right answers, and unmarked items were eliminated in the scoring. The scores on the post-test were scored by the same method.

Scope of the Study. The study was limited to the testing of factual knowledge about the human body, and on human reproduction. No attempt was made to measure pupils' understanding of biological principles. The measurement of student progress as related to attitudes and appreciations was not attempted, and the effect of different methods of instruction upon student informational growth was also beyond the scope of this study.

Definition of Terms. The term "progress" or "growth", which is used interchangeably in this paper, refer to the increased student retention of factual knowledge. To determine the pupil progress according to this definition, it is obvious that one must have a measurement of the pupil's factual information as he enters the study of sex education. The pre-test was given to measure this knowledge.

The Findings. The results of the pre-test were based upon the answer sheets of pupils. Of this number 18 were boys and 14 were girls. The mean score for the group was 4.47, with a standard deviation of 1.90. The highest score made by any boy

was 20, and by any girl was 16.

It was also obvious that in measuring growth one must have a measurement of the pupil at the completion of the course. The post-test was used for this purpose. On the post-test, the mean score was 13.59, the standard deviation was 3.91, and the highest scores ranged from 16 for girls to 20 for boys.

The above statistics reveal that there was an increase of 9.12 points in the mean score of the group taking the post-test. Using the critical ratio technique, a critical ratio of 11.69 was obtained. This indicates that the difference between the mean scores on the pre-test and post-test is significant at a one degree level.

Conclusions. The preceding results and interpretations were worthwhile from a descriptive point of view. However, aside from this value, the results of this study lend support to the practice of diagnostic testing. These data appear to support the contention that teachers ^{should} take notice of students' previous training. A mean score of 4.47 on the pre-test may not represent any great achievement, but it does represent some knowledge of the subject. The educational implication in recognition and use of such information can improve teaching by relating the subject matter to the pupil needs.

The more significant results and inferences of this study are summarized as follows:

1. There was an increase of 9.12 points in the mean score of the group taking the post-test; that is, the pupils acquired some factual knowledge about the human body and human reproduction.

2. The previous training and experiences should be recognized in teaching method.

3. Pre-test results are particularly important in diagnosing weaknesses in the pupil's previous training and discovering areas in which the pupil needs specific direction and guidance.

APPENDIX C - NOTICES

WILLIAM FOX SCHOOL

P. T. A. STUDY GROUP - 1947-1948

THEME: HELPING PARENTS TO LIVE WITH THEIR CHILDREN

These meetings will be held on Wednesday mornings from 11 to 12 o'clock. The first four will be devoted to discussions of Sex Education for young children. Time will be allowed at each meeting for questions from parents concerning their problems. The leaders will be as follows:

- Oct. 15 - Mrs. Sue Christian - Teacher of Sex Education at Hill Junior High School
- Oct. 29 - Dr. Edward Holmes, Jr. - Assistant Director of Public Health
- Nov. 12 - Miss Jessie Haynes - Retired Principal and Supervisor of Elementary Schools
- Dec. 10 - Dr. Abner Robertson - Executive Director of Cooperative

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- Jan. 14 - Mr. W. H. Deierhoi - Ass't Superintendent of Schools
Subject: New Ideas in Character Education
- Jan. 28 - Rev. Theodore Adams - Pastor First Baptist Church
Subject: Spiritual Values in Education
- Feb. 11 - Mrs. Louise E. Broadus - Principal of Fox School
Subject: Enriching the Experiences of Children
- Feb. 25 - Rev. A. L. Currie - Pastor Second Presbyterian Church
Subject: What is Peace?
- Mar. 10 - Mrs. Louise T. Kirby - "Book Lady" of Miller and Rhoads
Subject: Your Children and Books
- Mar. 24 - Mrs. Louise E. Broadus - Principal of Fox School
Subject: Living Happily With Our Children

All parents of Fox School are cordially invited to attend these meetings. Nursery care for young children will be provided.

Mrs. R. Peyton Grymes, Chairman Education Committee
Mrs. R. T. Laird, President Fox P.T.A.
Mrs. Louise E. Broadus, Principal Fox School

VITA

Sue Booker Christian was born in Appomattox County, Virginia, educated in the public schools of the same county, and attended Longwood College, where she received the Bachelor of Science degree.

Her professional experience includes teaching in Winchester, Virginia, Trenton, New Jersey, Cumberland, Maryland, and Richmond, Virginia. She is now teacher of general science in Albert H. Hill Junior High School in Richmond, Virginia.