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ABSTRACT

This K-12 curriculum guide represents North Allegheny's integrated, planned, and continuous program covering various topics concerning human development at different age levels. The major objective of the guide is to establish for teachers acceptable content and materials which focus generally on human development but more specifically on topics of physiological growth and drug education. Student goals stress learning not only the facts about the body, but also the development of health attitudes toward normal changes. In regard to drug education, students learn that present behavior influences future health. The guide is arranged into two major sections by elementary and secondary grade level. Each section includes: 1) guidelines for program development; 2) behavioral objectives; 3) teaching suggestions; 4) activities; and 5) suggested resource materials. For an evaluation of the human growth program see SO 006 169. (SJM)

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HUMAN GROWTH AND DEVELOPMENT  
CURRICULUM

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North Allegheny School District

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# HUMAN GROWTH AND DEVELOPMENT

## INTRODUCTION

"Human Growth and Development" is a phase of North Allegheny's program dealing specifically with physiological growth, smoking, and physical change agents such as alcohol and drugs.

Human growth and development education has always been an important, although sometimes not thoroughly enough planned, part of the school program. Discussion with teachers affirms that a number of excellent units have been built into the course of study at different age levels and subject areas. Since the entire program cannot be covered in any one area (such as tenth grade biology, the eleventh grade physical education, or possibly the seventh grade health class) the planning committee has developed an integrated, planned and continuous program. The program has been designed in a sequential series covering various topics at different age levels. Material will be introduced wherever it is appropriate.

This planned program will establish for teachers the content that is acceptable within North Allegheny Schools at various age levels and will provide teachers with materials that have been selected accordingly. Acceptable content was derived from a variety of sources, including the available literature representative of many schools of thought. Other vital resources were the people involved in teaching the content, those responsible for decision-making, and others in the school community. The program has been presented to teachers, the Parents' Advisory Council, the entire North Allegheny Administrative Staff, the teaching staff, community groups and individuals requesting examination, and to the School Board for final examination and approval. The Human Growth and Development Program was approved on July 14, 1970, by the School Board.

The 1970-1971 school year was used for in-service training and for adult education efforts. Formal programs for the teaching staff were arranged with Dr. Steven R. Homei, Dr. William Urricheo, and others. Other opportunities included faculty review committees and grade or departmental meetings; both resulting in helpful suggestions for the written program.

### Planning Committee:

Dr. Joseph F. Lagana, Director of Secondary Education  
Mr. Donald E. Hartswick, Director of Elementary Education  
Mrs. Mildred Faber, Head School Nurse  
Mr. Robert Watford, Social Studies Specialist  
Mr. Joseph Wissinger, Science Specialist  
Mr. Joseph Drazenovich, Health and Physical Education Specialist

## General Information Concerning the Program in Human Growth and Development

Although there may be instances when a teacher wishes to have additional help from the school principal, nurse, physician, or other specialists, the content of this curriculum is ordinarily best taught by the regular teacher of the grade or subject. The principal should be consulted before any plans are made to involve other personnel. It is essential that teachers have opportunities to participate in learning experiences, including experiences with outside consultants, to further the continual growth of teaching competence and effectiveness.

It is important that each teacher recognize the necessity of frankness as well as discretion. Thus, questions that are asked honestly should be answered honestly within the content of the grade. The teacher can always suggest that students discuss questions with their parents.

The teaching aids listed in this Curriculum Guide have been selected carefully. No other films, tapes, booklets, etc., may be used as replacements or supplements, unless approved by the Directors of Education.

Provision should be made to excuse students from particular recordings (including films, tapes, records, etc.) and follow-up discussions upon written request of the parent. All such requests must be referred to the principal and then honored by the teacher. Any written or verbal request to excuse a student from a particular recording should be followed by an excusal request form. (A form is attached for this purpose). Requests are approved for specific recorded elements of the program. Blanket requests covering the entire program obviously cannot be approved and parents making such requests should be advised accordingly. The principal should have annual previews of materials for interested parents to advise them of the content and the approximate schedule for use in the classroom.

All films and filmstrips must be ordered through the district Curriculum Materials Center. The building principal must approve such orders and be informed of when the materials are going to be used.

NORTH ALLEGHENY SCHOOL DISTRICT

PARENTAL REQUEST TO EXCUSE A STUDENT FROM  
A SPECIFIC ELEMENT OF THE HUMAN GROWTH AND DEVELOPMENT PROGRAM

Name of Student \_\_\_\_\_ School \_\_\_\_\_  
Grade or Class \_\_\_\_\_

I hereby request that the student named above be excused from following part of the Human Growth and Development Program for this school year. Please be specific by naming the film, filmstrip, recording, or other element of the program for which excusal is requested.

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Requests for excusal from particular recordings (films, filmstrips, tapes and records) and discussions immediately following the use of such recording, may be considered approved unless the building principal or teacher responds to the request.

Parental Signature \_\_\_\_\_ Date \_\_\_\_\_

## INTRODUCTION

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Sex Education in Perspective: Guidelines for Program Development

(Unpublished as of July 1, 1971)

PREFACE

There are no simple answers for questions about sex educational needs which have gone unmet for generations and a little catching up with yesterday is required before the offspring of yesterday can logically and confidently plan for tomorrow.

Discussions with any group of children will demonstrate that they know that the need to be popular, the need to be accepted, the need to escape pressure, and the need to find love or be wanted are the basic causes of the behaviors listed above. (Early pregnancy, cigarette smoking, drugs). The behaviors are, so to speak, the mechanics of the problem. Dealing with the how of a problem is not the same as dealing with the why of the problem. Today's youth are asking to understand the why. The traditional substitute for adult guidance in this area - the street corner - is simply inadequate to the task of helping young people understand the why. Adults will not be able to help young people either until student needs are identified, their concerns are recognized, and an education relevant to the learner and not the teacher is implemented.

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Excerpted out of context of development, it would seem on the surface that today's youth are basically different from the adults who came before them. However, viewed within the context of the development of the total person it usually turns out that youth are really not different at all.

That one questions in order to understand, does not in any way take away from the significance of what is being questioned. Persons who understand the basis for beliefs, laws, values, and ethics, find them even more meaningful. One cannot deal with any aspect of human behavior without exploring the basic nature of growth and maturation, the development of attitudes, the capacity of man to understand, or his need to find the same meaning in life as those who wrote the basic documents of religion or the Constitution of the United States.

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It is tempting to stress education for sexuality as separate and distinct from health education and certainly as an entity divorced from education about drug abuse, alcohol misuse, and smoking, but it is difficult to separate the image a man has of himself from what he thinks he must do to prove his manhood to society.

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Each generation of youngster must discover why values, ethics, and morals are valid. Perhaps what the adult has to offer youngsters is not so much directives for behavior, but rather experience in solving problems and the discipline and restrictions required by children that they be able to think and make decisions without getting hurt in the process.

Helping a youngster grow to responsible independence may be a far greater challenge to parenthood and society than the process of bearing the child and tending to its biologic needs.

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It may be that the greatest challenge in education is really to challenge youngsters to discover inside themselves the basic sense of values which all children are capable of before the world exploits them or makes them calloused and indifferent with time. Drawing children out and making them think, of course, takes time and a confidence in youngsters.

.....(Children) are really trying to seek answers to the following basic questions:

Who am I?

What can influence me?

How can I control what can influence me?

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From the observation that youngsters seem to avoid asking questions about sex during the time period spanning the ages five to six to ten to twelve, ... the idea that children are disinterested in an attempt to avoid matters of a sexual nature got started. Children have been categorized as latent with respect to sexual interest. An examination of the premises upon which the concept of latency is based, however, reveals that the lack of questions and child's disinterest in or lack of willingness to discuss sex with family is probably a reaction to the behavior of the family. Latency probably more represents a reaction of a child to his family or immediate social setting and environment which finds answering the questions of the child about sex very difficult, perhaps embarrassing or at least awkward. It is the family and social setting which encourages latency, rather than some basic need of the child.

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Perhaps the single most important factor which warrants a school or church becoming involved in teaching the concepts of sex education is their opportunity to work with peer groups and generate honest communications based on the dignity of being human. When committees fail to accept the responsibility for helping groups of persons understand themselves and their relationships, group personality defects can result.

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The total person concept implies the use of physical, emotional, social, spiritual and intellectual dimensions of man. However, it must be remembered that these dimensions of the individual do not mature at the same rate. Physical maturity appears first. Social awareness and activity, a function of local environments, may come long before social maturity. Intellectual maturity and the accumulation of a vast amount of information, a frequent outcome of technologic education and mass media, in no way implies an analytic ability or maturity of judgement. Emotionally charged behavior, typical of the adolescent, does not imply emotional maturity which comes later. The awareness of abstract concepts appearing during adolescence and often younger, does not imply the ability to use these thoughts to develop insight and recognize the meaning of values, ethics, laws, morals, etc.; this is often a product of the later decades of life.

Pages 49, 50

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One should initially develop the simplest language that communicates and not force a language of science on children.

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Underneath the outward signs of boredom in class discussion, there is frequently intense involvement.

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One of the main reasons for confusion over the topic of sex education is that the rehabilitative or even therapeutic educational requirements of adults are not the same as the basic educational requirements of the child.

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Children seek to understand themselves, their environment, and responsible decision-making.

- a. Examine anatomy, physiology, emotions and attitude, growth and maturation, reproduction and creative potential, growth environments, prenatal and post natal care, puberty, menopause, individuality, etc.

- b. Understand that one's environment includes an appreciation of what and how factors can influence an individual.
1. Influence of an individual upon himself - drives, desires, sexual feelings, masturbation, mental mechanisms, and compensatory behaviors.
  2. Others and their effect upon the individual - family life, inter-personal relationships, dating behavior, premarital relationships, marriage, parenthood, homosexuality, strangers, social pressure, etc.
  3. Influence of things upon the individual - pornography, diseases, pregnancy, labor, contraception, marriage vows, symbols, etc.
  4. Influence of events upon the individual - graduation, first date, marriage, birth, divorce, abortion, etc.
- c. The need to understand rational and irrational decisions cut across all behavioral aspects of life.

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I am an individual. I am unique. Previous factors have influenced me. I can create or produce many things. Many factors influence me. Other people influence me.

Pages 107, 111

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Key stages in program implementation:

Recording the first hundred behaviors of the children to be worked with, with a list of apparent motivations.

Develop a total person concept with a class of youngsters using their behaviors, comments, incidental experiences, and the usual activities of the classroom to do this.

Allow youngsters to ask questions.

Engage an entire class (80 - 200 or 300) in large group discussions with a peer group modifying effect such a discussion may have.

By starting with a large group discussion, then proceeding to discussions with all of the boys and all of the girls of a particular grade level, then speaking with small classroom size groups of children, the staff can quickly discover the educational needs and confusion in knowledge, attitudes, and practices of the children and what they think is expected of them.

As long as education is aimed at the human, and not simply the biological or intellectual components of the human, it will require a human to serve as the prime motivational influence of learning and to demonstrate the relevancy of knowledge. Media simply serves as a resource for the teacher.

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Selected teaching suggestions, pages 132 - 142:

- Use initial group discussions in an inductive manner, drawing upon the experiences of the audience to develop the understanding prerequisite to rational and logical analysis of the subject
- Recognize that no training heretofore automatically qualified any professional in the area of sex education; but rather the combination of experience with young people has accidentally prepared many to serve in the capacity of teacher.
- Realize that the initial reactions of the individual are a function of their individual experiences and that time is required for attitudes to change.
- Recognize and appreciate that the home has an initial responsibility for self-awareness, human growth and maturation education, and that the school is the resource to the home.
- Recognize that poorly defined and refined definitions of parenthood might make many feel rejected, challenged or anxious that their prerogatives were being taken away by schools planning sex education.
- Recognize that in no other area is there a greater need for excellent teaching skill and mature judgement.
- Recognize that such qualifications are not a function of marriage, parenthood, or age, but are more likely to be the function of an individual who had the benefit of exposure to a great deal of experience with children and the study of them.
- Recognize that no single discipline, grade level, or setting is singly responsible for presenting the concepts underlying sex education.
- Recognize that because as adults one can finally discuss sexual behavior and use proper terminology, without blushing, is no excuse for encouraging the youngsters to do the same.

- Recognize that an awareness of self can be achieved through training and that one cannot achieve personal growth by tearing people apart.
  - Recognize that four letter words are inappropriate for use with children who seek another method for expressing themselves when their environment does not ridicule them for trying.
  - Recognize that one does not have to become one of the boys to help a boy become a man.
  - Recognize that the ultimate goal of program development should be the capability of the school and community to draw upon its resources to implement its own program.
- 

Concluding remarks in the texts:

Paraphrasing the comments derived from children . . .

As an individual I have physical, emotional, social, spiritual, and intellectual dimensions.

I need to grow and mature.

I need to become an individual, unique, meaningful, and realize my potential, discovering all that I can become and find my place.

For their own reasons, some people look at me and see style of hair, color, sex, drugs, or whatever.

Thank you for looking at me and seeing me, encouraging my potential and strengths.

I do have the capacity to "become" if people like yourself will let me.

It could be that sexual fixations, drugs, tobacco, and other influences will have a significant influence in the lives of today's youth, where it could be that you will have a greater influence by helping a child see beyond these fixations and discover as much as any human can, who he is, and what he might become.

NORTH ALLEGHENY SCHOOL DISTRICT  
GROWTH AND DEVELOPMENT PROGRAM

Grades 1 - 6

Goals

Human growth and development education consists of instruction to develop understanding of the physical, mental, emotional, social, economic, and psychological phases of human relations as they are affected by male and female relationships. Obviously, it includes the learning of facts about the body, but far more important than facts is the developing of attitudes - how shall we think and feel about human relationships. It also includes learning about "respect for oneself and others"

An effective program in human growth and development is the responsibility of the classroom teacher. Obviously, the classroom teacher may request assistance from school nurses and other resource persons. The curriculum must be planned and be accepted by the community, but the teacher is the most important factor in the success of this program. A teacher's acute understanding of the skills of living and human interrelationships, and his ability to promote a relaxed atmosphere in which the students can feel free to question and exchange ideas are desirable characteristics. Important constituents of a successful teacher are:

1. A thorough liking and sympathetic understanding of children and youth; a trust and belief in his pupils
2. A wholesome attitude toward the personal development of each child. One way to demonstrate this wholesome attitude is to answer questions frankly and honestly, within the realm of the individual child's knowledge and capacity
3. Good common sense and judgement which would include a fine sensitivity about the various codes, customs, and ideals of the community
4. A spontaneous dignified sense of humor is certainly in order, without expressing humor at the expense or embarrassment of another.
5. A knowledge of scientific resource materials to aid his own proficiency and to be able to recommend to students for their own use. These resources should be based on the students' established knowledge and psychological readiness. All growth and development education should be anticipatory rather than "too late"
6. Complete familiarity with children's needs and interests, the subject matter for the grade level, and the resource materials listed in the guide.

## General Objectives

Below are listed several general objectives which the teacher should aim for the child to achieve. The child's learning can be categorized into habits, skills, attitudes, and appreciations. If the teacher is successful in developing habits and skills, healthy attitudes and appreciations will follow. By the end of the course, the child should have accomplished these goals.

1. Build a wholesome attitude toward the process of growth and development with respect and reverence for understanding one's self.
2. Understands the meaning of "modesty" in behavior patterns without an accompanying feeling of shame.
3. Be willing to discuss the problems of growing up.
4. Knows and uses appropriate terminology in reference to himself within his own knowledge and capacity.
5. Understands the growth and development of all living things as natural and routine.
6. Shows a sense of wonder and appreciation for the miracle of life and a willingness to accept the responsibilities that accompany it.
7. Accepts each individual as unique, and while there is an average rate of growth and development, no two people will follow the same growth pattern.
8. Knows and understands sex differences in boys and girls and their physical maturing rate.
9. Appreciates the family as the basic unit of society and willingness to accept responsibility and loyalty toward the family unit.
10. Appreciates the important functions the family members have in the community and what contributions he can add to them.

## Teaching Suggestions

If a teacher is self-conscious and hesitant to use correct terminology and discuss certain aspects of this program, the student will reflect this in his attitudes and performance. Several techniques for putting the student at ease are:

1. Have the students hand in anonymous questions before doing various units. The teacher can then see what area to emphasize and what misinformation there is. In this way, the student will not be hesitant about asking "silly questions".
2. Use the technique of counter questioning. This encourages critical thinking and helps students work out their own answers to some of the questions.

3. Role playing - this also encourages critical thinking
4. Films - use the films as a take-off to discussion
5. Audio-visual materials, pictures, and charts will simplify harder concepts and make the program more interesting for the child
6. Avoid morbid questions. Children will often contribute stories of unpleasant incidents; ("I saw a child born without arms, etc."). Turn this to the positive (science is advancing in knowledge about these happenings).
7. Keep the instruction close to the child's background experiences
8. Do not moralize or take a partisan view. Present the facts and guide students toward critical evaluation of problems. Answer all questions or the child will go to others who may be misinformed for his answers. The teacher can always suggest the child discuss it further with his parents. By answering questions clearly and frankly, the teacher will avoid the possibility of being misunderstood.

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. The child's curiosity should be allowed to develop in a natural and open manner. By the end of this program he should be freely participating in the class discussions and freely asking questions.
2. He should be able to talk about the growing up process and demonstrate his understanding in related classroom activities.
3. He should be able to use appropriate terminology according to his own background experiences and have confidence that it will be acceptable as long as it does not infringe upon the rights of others.
4. He should be able to differentiate between sex roles. He should be able to explain that boys and girls may have similar as well as different roles when they grow up.
5. He should demonstrate a sense of wonder and appreciation for his body by showing through his daily conversation and attitudes and performance that he is able to apply good personal hygiene in his life.
  - a. Does he know which foods are healthy and help the body to grow?
  - b. Does he know rules for getting plenty of rest and exercise?
  - c. Does he know how to keep himself clean and neat?
  - d. Does he know how to prevent common diseases and can he recognize the signs of sickness?
  - e. Does he practice these rules and follow them daily?
6. The child should demonstrate his understanding of the right to privacy for everyone.
  - a. In the activities with his peers (such as changing clothes).
  - b. Knowing and practicing acceptable behavior.
7. The child should be able to list examples of the concept that all living things reproduce - life comes from life, using his own experiences with plants and pets.
8. The child should be able to show how different living things grow and change by drawing pictures or constructing a chart.
9. He should be able to explain how animals show parental care and know how different animals feed and protect their young.
10. He should recognize pictures of common animals and their young, and recite the adult name and the name of the young (cow-calf, sheep-lamb, etc.)



- 11. He should be able to generalize from specific examples that every human baby has to have a father and mother.
- 12. He should be able to explain verbally how humans grow and develop from birth to age five or six.
- 13. He should show evidence that he knows that the purpose of a hospital is to help people. He should be able to identify some major tasks in a hospital and explain what the staff does to support the hospital's purpose. An illustrated story may be written about the hospital.
- 14. He should show understanding that most babies are born in a hospital and that the mother and baby get special care from doctors and nurses.
- 15. He should be able to tell the ways a mother cares for her baby's needs and what some of the needs are.
  - a. Food
  - b. Love and protection
  - c. Cleanliness
- 16. The child should be able to draw on his experience to tell how he has grown and changed from a helpless newborn infant to his present stage of growth and development. He can do this by reciting or drawing pictures.
- 17. The child should show that he understands the concept of family role through stories, pictures, and discussion. He should know:
  - a. Who the members of his family are.
  - b. What the relationships between members of his family are.
  - c. What the responsibilities of members of his family are.
  - d. What the child's own responsibilities are.
  - e. What the shared responsibilities are.
- 18. The child should be able to contribute to discussion of such topics as:
  - a. How families are different (comparing and contrasting: city-urban, farm-rural, size and makeup).
  - b. How families show love for one another.

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. Demonstrate understanding of growth and development in plants and animals by explaining the following:
  - a. Living things reproduce their own kind from generation to generation.
2. By charts and pictures, demonstrate that he knows the new plant will reproduce like the parent plant, i. e., each plant is unique in what it produces.
3. Be able to list simple steps in reproduction in plants by:
  - a. Seeds
  - b. Spores
  - c. Parts of old plant

Different plants reproduce in different ways.

(\*NOTE: Assuming reproduction of plants has already been covered in science, these are concepts which should be reinforced.)

4. List what things the plant needs to grow.
5. He should know that the higher animals must have a father and mother. He should be able to pair names of male and female animals (ewe/ram, hen/rooster, etc.).
6. He should demonstrate his understanding that all animals do not grow in the same way at the same rate. This could be done by bringing in pictures of animals at different stages.
7. The child should be able to list at least two animals which are hatched from eggs outside the mothers' bodies.
8. The child should be able to list three animals which are live bearers.
9. The child should be able to group the animals which have been discussed as to how long they care for their young.
  - a. Not at all
  - b. Few hours
  - c. Few days
  - d. Few weeks
  - e. Few months
  - f. Few years

10. The child should be able to list how these animals feed their young and relate this to #9. (A chart would simplify this.)
11. The child should be able to compare and contrast animal and human families -- their similarities and differences.
12. The child should have an understanding that every child must have a mother and father.
13. The child should be able to understand that a baby grows inside the mother's body, after discussing the development of pets (dogs, cats) growing inside the female.
14. The child should be able to state that the baby shares the mother's food and oxygen supply while it lives inside the mother's body.
15. The child should be able to explain the procedure of the mother going to the hospital where trained doctors and nurses take care of her and the baby.
16. The child should be helped to understand the many ways in which a family prepares for the baby's coming and cares for it.
17. The child should be able to discuss what the responsibilities of the parents are and give examples. He should be able to do the same for his own responsibilities.
  - a. Feeding
  - b. Protection and shelter
  - c. Shared responsibilities
18. The child should be able to recognize and discuss in what ways boys and girls are different.
  - a. Different clothes
  - b. Different games
  - c. Examples of different roles during childhood and adulthood
19. The child should be able to compare and contrast responsibilities of males and females according to his own ability to distinguish between the male and female roles.
20. The child should demonstrate understanding of the roles within the family and community by being able to list, discuss and illustrate.
  - a. Kinds of work fathers do in the family and community
  - b. Kinds of work mothers do in the family and community
  - c. Kinds of work boys and girls do in the family and community

21. The child should be able to explain that our thinking and feeling comes from the brain. He should be able to give examples of:
- a. How his feelings affect his thinking
  - b. How his thinking affects his feelings
  - c. How to understand feelings related to achievement, success, acceptance, winning, losing, etc., and give situations from his own experience as examples
  - d. He should be able to discuss how to understand the feelings of others and how he affects them. He can demonstrate understanding by discussing this within the content of the family role.
    - (1) How family love affects growth and development
    - (2) Ways in which family members show love for each other
22. From discussion of objective #21, the child should be able to list ways of getting along with others including:
- a. Good manners
  - b. Consideration and thoughtfulness
  - c. Respect

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. The child should be able to compare and contrast the growth and family needs of animals with the growth and needs of humans. He should include:
  - a. The similarities and differences in the need for a loving family between animals and humans.
  - b. Relative differences in age, e.g., "grown up" and "old" for a person, a bird, a dog.
2. He should be able to list and explain life cycles in plant reproduction. He should demonstrate his knowledge of vocabulary for parts of the flower by a simple labeled diagram, and be able to tell the function of each part. The child can also do this using a live flower.
3. He should also be able to differentiate between cross-pollination and self-pollination. (Note: Third grade study of plants should precede this unit.)
4. The child should be able to tell the necessary things which a plant needs to grow and relate these to a plant's dependence on its environment.
5. The child should be able to discuss the reproduction and nurture of animals. He should be able to discuss that certain animals reproduce from eggs which develop outside the body (fish and duck are used in the film "Human Beginnings"). Some animals reproduce from eggs which develop inside the body (use the film "Human Beginnings").
6. He should use appropriate vocabulary in discussing the film "Human and Animal Beginnings".
  - a. Process of reproduction in fish including:
    - (1) How and where eggs are laid by the mother
    - (2) The hatching process and immediate independence of baby fish
  - b. Process of reproduction in the duck
    - (1) Embryo growing by receiving food from yolk
    - (2) Hatching and immediate readiness to find food
    - (3) Relative time of dependence on mother
7. The child should be able to compare and contrast how different animals care for and feed their young using specific examples of animals.

8. The child should be able to discuss the nurture of humans following the film, including the following:
- a. Importance of love between father and mother in order for love to be shared with children.
  - b. The extent of the embryonic development as covered in the film.
  - c. The student should show understanding of dependency of the small child by listing examples of those things a small human baby can do by itself and those things for which it is dependent on adults.
    - (1) The child should compare and contrast his list with animals and the varying degrees of dependence when first born.
9. The child should demonstrate his understanding of the growth process by listing (perhaps on a chart) the different ways in which he grows. Concepts should include:
- a. Physical growth and be able to tell:
    - (1) What foods will help keep him healthy
    - (2) What sources these foods come from (parts of animals and plants)
    - (3) Health precautions taken in preparing foods
    - (4) How food must be digested so the body can use it to grow.
      - (a) Digestion begins in the mouth
      - (b) How cells use food for growth and make waste products
      - (c) Elementary explanation of circulation and cell interchange
      - (d) Elementary explanation of respiration and its relationship to circulation, oxidation, cell interchange
      - (e) How his body gets rid of waste products
    - (5) How sleep helps him grow
    - (6) How he grows by exercise and activity
  - b. How he grows through learning by explaining the ways in which he learns:
    - (1) Games
    - (2) School
    - (3) Family
    - (4) Reading
    - (5) Friends
  - c. How he grows through sleep.
  - d. His growth in developing a sense of right and wrong, including asking advice and reassurance concerning right and wrong, tattling, telling fibs, etc.

- e. He should be able to discuss his growth in relationship with others. (This can be measured through everyday experience and role playing)
- (1) How to place worth on his own actions and to gain respect for himself and others.
  - (2) Ways to be considerate of others and respect them for their rights and feelings.
  - (3) How it affects his feelings when he is unselfish and cheerful toward others.
  - (4) Guides for good grooming and good manners are important because they increase self respect, show respect for others, and increase the respect others have for us. The child should give examples including:
    - (a) Taking turns and concern for others
    - (b) Why people should be clean
- f. The child should be able to discuss common emotions and feelings (love, jealousy, fright, happiness, surprise) and tell which of his emotions he would like to control and how he might do it.
- g. How his feelings affect his physical condition and how his physical condition affects his feelings.
- (1) Stomach upsets and headaches are sometimes caused by emotions
  - (2) Illness or being tired causes irritability
10. He should demonstrate his developing respect for others by listing people he admires, the traits which he admires and telling why he admires them. His daily behavior should show respect toward others based on these traits.
11. Demonstrate an understanding of the family role by comparing and contrasting similarities and differences in roles of mother and father and child. He should be able to explain in what ways children grow within the family structure, giving examples of physical, emotional, mental, and social development.
12. Show understanding of how families and communities help each other.
- a. What kind of work father does in community?
  - b. What kind of work mother does in community?
  - c. How boys and girls help in the community (compare and contrast).
  - d. How the community helps the family.

## Primary

### Suggested Vocabulary

The teacher is requested to maintain a vocabulary listing of human growth and development terms which are commonly used by students at his or her own grade level.



### Pre-Film Activities

1. Tell children they have probably gathered some incorrect information and encourage them to straighten it out.
2. Gradually introduce ideas in the film. Tell the children about the film a day before (perhaps in grade six there could be a preview committee); guide the children in ideas and concepts to look for.
3. Use the film to lead into a discussion. Begin leading questions to avoid embarrassment. Be convincingly permissive, honest, and straightforward in approach and answers. Use technique of counter questioning to stimulate thinking.

## ACTIVITIES

## Primary

1. Reproduction and animal needs and habits can be experienced through classroom pets and aquarium life; small animals or a terrarium are excellent for classroom experience on life cycles. Discuss children's experience with pets.
2. Growth uses energy. Have bulletin board displays or make booklets on needs of the body and guides for personal hygiene.
3. Have the children bring pictures of themselves as babies. Have a "Guess Who" bulletin board. Have them note ways they've changed as they've grown.
4. Let the children have a "playhouse" center where the children can reveal attitudes toward family life and members. Encourage role playing and skits.
5. Visit a zoo or farm nearby to learn how the animals live and are cared for. If possible, visit in the spring when there are baby animals.
6. Display pictures of animal babies and adults. Label each and pair them so children will learn proper vocabulary for the adult and its young. Do the same for male and female names.
7. Have children draw pictures showing babies before they are born. Do not ask the children to identify themselves although some will. Compare incorrect information and at conclusion of unit have them draw this again. In this way, the teacher will know what to stress. The child can explain his picture by writing or telling the teacher who can record what was said.
8. Have the children collect frogs, tadpoles, or cocoons to see how lower animals reproduce.
9. Take a walking trip in the fall to note and record the places certain plants are growing. Then in the spring return to these places to see if new plants of the same varieties are coming up in the same locations where they were in the previous fall.
10. Have the children plant seeds. Let them learn what happens when plants are neglected by not caring for some. Have them compare and contrast the ones cared for and the ones left alone.
11. Make charts on how animals care for their young and humans care for their children. Discuss similarities and differences.
12. Have the children keep a record of what they eat for a week. Discuss the basic food groups and evaluate their meal planning.

13. Have the children read to find how odor and color of flowers attract insects.
14. Let children make a seed collection and explain the different ways seeds are spread.
15. Have the children find out how much they weighed at birth, how long they were, what time they were born (closest to midnight, etc.) and chart differences.
16. Have a height chart. Graph height range in the class and compare the individual differences.

## Resource Materials

## Primary

## Required Films

1. Human and Animal Beginnings, E. C.-Brown Trust. Natural scenes of newborn animals. Includes pre-birth growth and development and birth of the human baby in animation. Grade 3 in 1969/70 (teacher's manual available). Thirteen minutes - color.

## Required Charts

1. Beginning the Human Story: A New Baby in the Family, Scott Foresman. Twelve 20" x 20" color photographic charts which present scenes in the everyday life of an inner city family from the time the two older children are told a new baby is coming, through the arrival of the baby and his first year; (teacher's manual available).

## Required Filmstrip

Living With Your Family

1. "What Is A Family?"
  - Kinds of Families
  - How Families Live
  - How Parents Show Love for their Children
  - How Families Work Together
2. "The Family Has a New Baby"
  - Getting Ready for the New Baby
  - The New Baby at Home
3. "A Day with Your Family"
  - Starting the Day
  - Working for the Family
  - Ending the Day
4. "Family Fun"
  - Family Fun Outdoors
  - Family Fun Indoors
  - Family Fun at Home

## Suggested Resources

## Films

1. Mother Hen's Family (The Wonders of Birth), Coronet Instructional Films  
This film shows how eggs are hatched by hens. Father and son follow the process of laying and hatching the eggs. Grade 1 - 10 minutes.
2. The Birth and Growth of Kittens, Baily Films - Robin and Billy are present when their cat gives birth to four kittens. Shows the kittens nursing, crawling, playing, and being weaned. Emphasizes the care the children give the kittens.
3. Tommy's Day - 15 minutes
4. Zoo Baby Animals - 11 minutes - color
5. One Day on the Farm - 11 minutes - color - Dairy Council
6. Tommy's Healthy Teeth - 11 minutes
7. Fish Family - 11 minutes - color
8. Seeds Grow into Plants - 11 minutes - color
9. Seven Little Ducks - 10 minutes
10. Growing Up, Growing Older, 10 minutes - color - (Regional Instructional Materials Center Catalog)
11. All About You - WQED Series

## Books and Pamphlets for Children

1. Bauer, W. W., M.D., et al, Just Like Me, Chicago: Scott Foresman Co.
2. Buck, Pearl S., Johnny Jack and His Beginnings, New York: Day, Inc., 1954
3. Gruenberg, Sidonie M., Wonderful Story of How You Were Born, New York: Doubleday and Co., 1952.
4. Irwin, Leslie, Ph.D., et al, Growing Every Day, Chicago: Lyons and Carnahan.
5. Irwin, Leslie, Ph.D., et al, You and Others, Chicago: Lyons and Carnahan, 1965.
6. Irwin, Leslie, Ph.D., et al, All About You, Chicago: Lyons and Carnahan, 1965
7. deSchweinitz, Karl, Growing Up: MacMillan Co.
8. Zim, Herbert, What's Inside of Me?, New York: William Morrow and Co., 1952

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. The child should be able to differentiate between tissues, organs, and systems by giving simple definitions and examples of each.
2. He should be able to explain and draw and label the simple structure of a plant cell and simple animal cell (protozoa, paramecium, etc.). Identification under the microscope is another measure of mastery.
3. He should be able to explain how a cell functions.
  - a. How cells use water, food, and oxygen
  - b. How cells produce and dispose of wastes
4. Demonstrate understanding of body processes by explaining the structure and function of systems. He should include:
  - a. Digestive system and its purpose
  - b. Excretory system - how human body secretes waste and human excretory process compared and contrasted to plants' and animals' excretory process. This should include a simple explanation of the structure and function of the urinary system and large intestine.
5. He should be able to discuss in elementary terms the process of circulation. He should include:
  - a. The purpose of the circulatory system
  - b. Structure and function of the heart
  - c. Construct a simple diagram of the path of the blood as it circulates through the body
6. The child should be able to identify physical characteristics which are determined by heredity. He could do this by tracing these back through his family. He should be able to identify these physical characteristics in plants and animals (including humans).
7. Through his identification of inherited traits in #7, the child should demonstrate his knowledge that heredity affects growth pattern and rate. He should include:
  - a. Differences in growth rate among plants and animals (including humans)
  - b. Differences in growth rates between boys and girls; (this will help alleviate worry about these differences)
8. He should be able to use appropriate terminology according to his own background experiences and have confidence that it will be acceptable as long as it does not infringe upon the rights of others.

9. The child should be able to contribute to a discussion of how he can become a better family member. He should include specific examples:
  - a. How a family contributes to the health and happiness of its members by following good health habits.
  - b. Duties and responsibilities of the student to his family.
  - c. Ways in which families can have fun together.
10. The child should be able to list and discuss the qualities found in a good friend and courtesies to follow in socializing with his peers and give specific examples.
11. He should be able to compare and contrast different emotions (happiness, sadness, frightened, curious, etc.). He should be able to give examples of each and tell how they affect his physical condition. He should also be able to write or discuss what situations make him feel this way.

See HERE I AM by Walter J. Limbacher (Dimensions of Personality Series, George A. Pflaum, Publisher, 1969). Available in building resource center in classroom quantity. Teacher's Edition contains helpful suggestions for class activities. Contents:

#### Development of Self Image

Self-Acceptance  
 Acceptance of Negative Emotions  
 Relationships with Family  
 Relationship with Peers  
 Relationships with Adults  
 Experiences which Reflect and/or Enhance the Self-Image  
 Self-Dislike

#### Intellectual Development

Definition of Terms  
 Awareness Role in Learning  
 Environmental Conditioning  
 Recognition of Others' Needs  
 Variety of Talents  
 Experiences to Reinforce Intellectual Skills  
 Decision Making

#### Social Development

Working Together  
 Relationships with Family  
 Relationships with Peers  
 Relationships with Adults

#### Emotional Development

Environmental Influences  
 Expression of Feeling at Different Ages  
 Behavior Related to Emotion  
 Importance of Feeling Toward Self  
 Recognition of Others' Needs  
 Experiences Promoting Acceptance of One's Feelings  
 Physical Influence Upon the Emotions

#### Physical Development

Bodily Functions  
 Biological Heredity  
 Environmental Conditioning  
 Experiences on Appearance and Measurement of Growth  
 Physical Feelings and Needs  
 Bodily Reaction to Emotion  
 Body Appearance

Respecting Individual Differences  
 Individual vs. Group Decision Making  
 Behavior Causing Negative Emotional Responses

## Objective

Enable pupils to consider the consequences of putting any drug, legal or illegal, into their bodies.

Resource Filmstrip: "What Are Drugs?"

1. Definition: Any chemical substance that affects the way the mind or body reacts can be called a drug.
2. Medicines are drugs. Forms vary - applied to skin, hypodermic, vapors, pills, liquids.
3. Some drugs are not used as medicine - nicotine in tobacco, marijuana, alcohol in whiskey, wine and beer, airplane glue.
4. What do drugs do?
  - a. Some supply body's needs to stay healthy
  - b. Some fight sickness
  - c. Some help control allergic reactions
  - d. Some reduce pain
5. How do drugs work?
  - a. Many work on the body's nervous system
  - b. Some are swallowed, enter blood stream, reach brain, and affect the body
  - c. Some are injected and reach the brain faster
  - d. Some stimulate the nervous system
  - e. Some make people feel drowsy (opposite of stimulants)
  - f. Excessive dosage or frequent use tend to make people lose control of themselves
  - g. Hallucinogens (LSD, mescaline) tend to distort things for users by making things look, sound, and feel twisted out of shape. Users are never sure what the experience will be like.
6. People need to be careful what is put into their bodies.
7. Too much of any drug can be dangerous. That is why doctors prescribe exact dosages.
8. Example of side effect: A drug that clears a stuffy nose may also make you sleepy.
9. Everybody is different: A drug that affects one person one way may affect somebody else differently.
10. When drugs are used properly, they can be very helpful.



11. When drugs are used for the wrong reasons, they can cause problems.
12. Example of physical dependence: narcotic addiction
13. Example of psychological dependence: cigarette smoking
14. Drugs can make a person feel better for awhile, but problems must be solved by each person for himself.

## Teaching Strategy

### Before Showing the Filmstrip

1. Ask the students the question, "How many of you have ever used drugs?" (The connotation of the word "drug" being what it is, you might expect a moment of hesitation on the student's part.)
2. Then ask, "How many of you have ever taken aspirin for a headache or a cold?" Raise similar questions with regard to their use of cough medicine, nose drops, vitamin pills, anti-histamines (for allergies), and antiseptics. Call for a show of hands after each question, but do not attempt to draw conclusions for the class. The purpose here is simply to start the students thinking about the meaning of the word "drug".
3. Ask the question, "Where do you think a pill goes after you swallow it?" This time write your students' thoughts on the blackboard without passing judgement on their accuracy.
4. Ask the class to give you definitions of the word "drug" and write these on the blackboard also.

### At the Discussion Break

Discussion Question: Which of the chemicals in the picture would you consider to be drugs?

1. Of the items in the picture, the aspirins and the vitamin pills are most certainly drugs. The remainder of the chemicals can be considered drugs only when they are used as such -- to produce a certain effect in the mind or body. The intent of the person using the chemical or the person administering it is the determining factor in this particular definition of the word drug.
2. Go back to the definitions of the word "drug" that you wrote on the blackboard and ask the class to help you evaluate the accuracy of their ideas, based on what they have just seen in the filmstrip.
3. Follow the same procedure with the question, "Where do you think a pill goes after you swallow it?"

4. Don't hesitate to turn the filmstrip manually back to key frames (e.g. diagrams of the nervous system) for review purposes.

### After Showing the Filmstrip

1. Ask your students about their personal experiences with prescription drugs: How many in the class have had drugs prescribed for them? What illnesses or other physical disorders were the drugs supposed to help correct? Did the doctor give them a physical examination before prescribing the drug? What were the instructions on the prescription label? How many pills or spoonfuls did they have to take? At what time intervals? Are any in the class allergic to certain drugs?
2. Ask students about their experiences with drug effects: How did a particular drug make them feel? Was this the main effect or a side effect? Did the doctor tell them about the drug's side effects in advance?
3. Discuss with the class the idea that the quantity of medicine that a person takes has a great deal to do with whether that particular drug is going to be helpful or harmful. (Refer back to the example in the filmstrip of the younger brother who swallowed too much baby aspirin.)
4. Bring wrappers or boxes from various "over-the-counter" drugs to class and have different students read aloud the dosage, ingredients, and caution notations.

### Additional Class Activities

1. Invite several different professional people in to speak to your class (or school assembly group) on the subject of drugs. The program should devote a good deal of time to answering student questions. For example, invite a physician to speak about the procedure he follows with regard to prescribing drugs for different patients; invite a psychiatrist to relate some of his experiences with drug users and to discuss mental health concepts; invite a pharmacist to discuss the contents and effectiveness of certain widely advertised "over-the-counter" drugs and the precautions he takes when filling prescriptions; invite a law enforcement officer to discuss state and federal laws with regard to illegal drug use.
2. Have students do individual or group research reports on drug manufacturing, international drug trafficking, government controls on the sale and purity of drugs and latest findings on the effects of different drugs. (A good deal of useful information can be obtained by writing to the National Clearing House for Drug Abuse Information, 5454 Wisconsin Avenue, Chevy Chase, Maryland, 20036.)

## Grade 5

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. The child should be able to chart the average pattern for growth and development on a simple graph. He should understand individual differences by discriminating between early and late growers. He should also be able to compare and contrast the growth rate and patterns of boys and girls. From the above, he should appreciate his unique growth and developmental pattern.
2. He should demonstrate his knowledge of the influence of heredity in determining growth rate.
  - a. Discuss his growth potential in terms of chromosomes and genes.
  - b. Discuss how disease can be hereditary and what some are.
3. List the structure and function of endocrine glands, the hormone each secretes, and their location in the body.
  - a. Pituitary
  - b. Thyroid
  - c. Pancreas
  - d. Adrenal
  - e. Gonads (testes and ovaries)

He should include in his discussion that endocrine glands are the same in boys and girls except for the difference in sex glands (gonads).

4. He should be able to discuss the effects of hormones on physical growth and development, including:
  - a. Pubic hair
  - b. Underarm hair
  - c. Male chest and body hair
  - d. Male whiskers and shaving
  - e. Female breasts
  - f. Growth spurts
  - g. Secondary sex characteristics
5. He should identify the effects of hormones on emotions. Include:
  - a. An understanding that his behavior is related to his emotions by listing and explaining some of these behaviors:
    - (1) Getting easily upset
    - (2) Shyness
    - (3) Showing off
    - (4) Feeling embarrassed
    - (5) Girls feel more womanly; boys feel more manly
    - (6) Awkwardness
    - (7) Varying feeling of independence

- b. An understanding that mixtures of happiness, depression, hate, love, anger, and loneliness are normal human emotions and often exist concurrently. See Dimensions of Personality Series: I'M NOT ALONE, available in classroom quantity in the building resource center
- c. Demonstrate that he is developing emotional control by:
  - (1) Overcoming his fear of emotion
  - (2) Expressing his emotions in constructive ways
6. Girls should be able to identify the female reproductive organs, their growth, functions, and care. Girls should be able to explain the physiology and function of ovulation and menstruation by showing the path of the egg from its ripening in the ovaries until menstruation occurs. (School Nurses can be of assistance, as a resource person.)
7. The fifth grade girls should be able to list rules for menstrual hygiene and explain why special attention to personal hygiene is given at this time. (School Nurses can be of assistance, as a resource person.)
8. Students should show knowledge of cell structure and function by being able to discuss:
  - a. Cell division and differentiation.
  - b. Ability of cells to take on different tasks of producing the complex parts of the human body.
  - c. Development of cells in abnormal patterns (tumor, moles, cancer, etc.)
9. Students should be able to describe the care which the body deserves and needs. The child can show his respect for the human body by his daily care of it.
  - a. Cleanliness
  - b. Dietary habits
  - c. Adequate sleep
  - d. Activity and exercise
  - e. Dressing for the weather
  - f. Developing wholesome, pleasant attitudes towards oneself and others

See I'M NOT ALONE, by Walter J. Limbacher (Dimensions of Personality Series, George A. Pflaum, Publisher, 1969). Contents:

Development of Self-Image

Self-Acceptance  
 Acceptance of Negative Emotions  
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Intellectual Development

Definition of Terms  
 Awareness Role in Learning  
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## Drug Unit for Grade 5

## Objective

Sensitize pupils to the variety of ways their attitudes about drugs are shaped by other people.

Enable pupils to develop a sense of responsibility for their own physical well-being, particularly where drug use is concerned.

Resource Filmstrip: "Outside Influence"

## Outside Influences:

1. Adult behavior.
2. TV drug commercials.
3. Older children.
4. Adults giving advice.
5. Other children your same age.
6. Must make up your own mind what to believe; if you take a drug, it goes into your body and nobody else's.
7. Peer pressure: Many times a person is persuaded to act a certain way because of something friends say or do.
8. How can you avoid being pressured into doing something you don't want to do.
9. Wise selection of a group of friends often helps avoid uncomfortable situations. What is "friendship"? Does it mean showing some understanding of a person's feelings when that person doesn't want to do something that most others want to do?
10. Sticking to one's personal convictions in difficult times is a sign of growth.

## Teaching Strategy

Review contents of "What Are Drugs" program from fourth grade

### Before Showing the Filmstrip

1. Ask your students to describe some of the alcohol and cigarette advertising they have seen. What kind of people are shown in these ads? What are they doing? Have they (the students) ever seen anyone in real life who looked or behaves like this?
2. Ask the class to help you make a list of physical and emotional problems that TV commercials claim can be "cured" by certain over-the-counter drugs. (The list might include: Headache, body pain, sleeplessness, fatigue, nervousness, bad breath, iron deficiency anemia, sinus congestion, etc. Write this list on the board with the name of an advertised drug next to each problem.)

### At the Discussion Break

1. Ask for student response to the different situations portrayed in the first half of the filmstrip.
2. Ask what they felt was the message in the first part.
3. Ask whether they were ever persuaded to buy something (not necessarily a drug) by an advertisement they saw on TV. Did the product look the same and work the same as it did in the ad? Were there certain things the ad failed to mention? Have they developed any personal methods of distinguishing between truth and exaggeration in advertising?
4. Ask students whether they themselves have ever exaggerated about something in their conversations with other people. Discuss some of the reasons why people exaggerate about their knowledge or experiences.
5. Ask students whether they have ever tried to persuade someone to do something. Discuss some of the reasons why people use persuasive techniques on each other.
6. Discuss the concept of "double standards" (Do as I say, not as I do). In what ways do adults use double standards in their dealings with young people? In what ways do young people use them in their dealings with each other and with adults.

### After Showing the Filmstrip

1. Ask the class to help you identify different groups in your school (athletes, musicians, kids who sit together in the lunch room, etc.). What brings different people together to form a group? (common interests, talents, ages, etc.)
2. Ask the class whether it is important to belong to a group? Why?

3. Ask if there is anyone in the class who recently joined (or possibly, was rejected by) a certain group. What methods do different groups use to accept or reject new members?
4. Ask if any of your students has ever done something he or she didn't really want to do just to "go along with the group".
5. Send one of your students (S), whom you know to be a well-liked and self-confident individual on an errand that takes him or her out of the classroom for a short time. While S is gone, draw two lines on the blackboard, one shorter than the other. Ask the class to help you do an experiment showing the influence of group pressure on a person's ideas. They are to help you convince S that the shorter line is really the longer of the two. When S returns, start the group persuasion in subtle fashion and carry it only far enough to raise a reasonable doubt in S's mind. At this point, begin discussing why a person sometimes doubts his own judgement when it means going against the group.

#### Additional Class Activities

1. See Fourth Grade listing of other activities.
2. Have students make a bulletin board collage using different magazine and newspaper drug advertisements. Invent an interesting theme for the collage so that it imparts some message to those who see it.
3. Ask different students to make a list of the advertisements that come on the air during their favorite TV shows. Compare the lists in class and discuss the persuasive techniques, used by different sponsors (what feelings, ideas, or needs did they appeal to, and how did they make the products look attractive?).



## Grade 6

## Objectives

Within the realm of the individual child's knowledge and capacity:

1. The student should be able to draw the structure of a cell (plant and animal), label it, and discuss its functions. The following concepts will be considered:
  - a. Cells carry on life and maintain growth.
  - b. Cells produce energy.
  - c. Cells function similarly but differ in their responsibilities. Cells cluster to make tissues, tissues make organs, organs make systems. Interrelationships should be noted.
  - d. Cells have 23 pairs of chromosomes which carry genes to determine heredity. He should be able to give examples of dominant and recessive hereditary traits and Mendel's Law.
  - e. Cells have nucleus and cytoplasm.
  - f. Cells produce carbon dioxide and waste products.
2. Define cell differentiation by giving examples of different cells in the body.
  - a. Muscle, bone, skin, nerve, brain.
  - b. Reproductive cells. Explanation should be given that cells in humans and certain other animals have 23 pairs of chromosomes, with the sex chromosome XX or XY.
  - c. Explain that life begins as a single cell.
  - d. How cells grow larger and how they multiply.
3. The student should explain circulation of the blood by listing:
  - a. Parts of the circulatory system.
  - b. The function of each part. (Heart, lungs, veins, arteries, capillaries, lymphatic system).
  - c. Explain the function of blood as a food carrier, how the food gets to the cells, and how the cells excrete the waste products.
4. The child should have an understanding and appreciation of the changes taking place inside his body as he reaches puberty. He should recognize himself as a unique individual by explaining:
  - a. The normal growth and development patterns.
  - b. Individual differences including late growers, early growers, and differences between girls and boys.
  - c. The influence of heredity in determining growth potential.
    - (1) In terms of genes and chromosomes.
    - (2) Exhibiting a sense of pride in family and individual development.
    - (3) Diseases that can be caused by heredity.
    - (4) Explanation of heredity potential and environmental influences.

5. Discuss the influence of endocrine glands and their hormones. Include:
  - a. Naming the glands and the hormone they secrete.
  - b. The influence of specific hormones on growth and development rate
  - c. The effects of specific hormones on emotions -- giving specific examples
6. Discuss the appearance of secondary sex characteristics and identify those that will appear in girls, boys, both.
7. Be able to discuss the reproductive process in the following stages:
  - a. Ovulation.
  - b. Fertilization and implantation.
  - c. Cell division and differentiation.
  - d. Embryonic development.
  - e. Fetal development.
  - f. Full term baby and childbirth.
  - g. Multiple births.  
(Twinning and other multiple births)
8. He should be able to name specific forces that affect emotions.
  - a. List hormones and endocrine glands and their influence on growth and behavior.
  - b. Influence of the environment on emotional growth (family, friends, teachers, other).
  - c. Heredity and how it influences emotions.
9. He should be able to tell how emotions affect various parts of the body.
  - a. Digestive system
  - b. Nervous system
  - c. Circulatory system
  - d. Respiratory system
  - e. Muscular system
  - f. Glandular system
10. The child should demonstrate knowledge and understanding of family structures.
  - a. He should be able to identify many kinds of families in our culture.
    - (1) Two parents and children
    - (2) One parent family
    - (3) Several generations living together in one house
    - (4) Children living with someone other than either or both of their parents
    - (5) Families where there are no children
  - b. He should be able to discuss purposes and functions of the family including:
    - (1) The importance of the family to its individual members
    - (2) Importance of the family to the community

- c. Tell ways to adjust to the typical family.
- d. Discuss ways in which family members discuss love and concern for each other.
11. The student should be exhibiting in his class behavior and attitudes a respect for himself and others. He should be appreciating qualities of maleness and femaleness, but realize that these characteristics, while typical of one sex or another, are not always distinct. For example, it is perfectly normal for a girl to like sports or for a boy to express emotion like pain, frustration, or sympathy by crying. The student's understanding of masculine and feminine roles can be expressed well through role playing and his relations with his peers.

See BECOMING MYSELF by Walter J. Limbacher (Dimensions of Personality Series, George A. Pflaum, Publisher, 1969). Available in building resource center in classroom quantity. Teacher's Edition contains helpful suggestions for class activities  
Contents:

#### Development of Self Image

Self Acceptance  
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Self-Dislike

#### Intellectual Development

Definition of Terms  
Awareness Role in Learning  
Environmental Conditioning  
Recognition of Others' Needs  
Variety of Talents  
Experiences to Reinforce Intellectual Skills  
Decision Making

#### Emotional Development

Environmental Influences  
Expression of Feeling at Different Ages  
Behavior Related to Emotion  
Importance of Feeling Toward Self  
Recognition of Others' Needs  
Experiences Promoting Acceptance of One's Feelings  
Physical Influence Upon the Emotions

#### Physical Development

Bodily Functions  
Biological Heredity  
Environmental Conditioning  
Experiences on Appearance and Measurement of Growth  
Physical Feelings and Needs  
Bodily Reaction to Emotion  
Body Appearance

#### Social Development

Working Together  
Relationships with Family  
Relationship with Peers  
Relationships with Adults  
Respecting Individual Differences  
Individual vs. Group Decision Making  
Behavior Causing Negative Emotional Responses

## Drug Unit for Grade 6

## Objectives:

Review and evaluate drug information expressed by classmates. Provide students with means of controlling and releasing feelings without resorting to drugs.

Resource Filmstrip: "Feeling Bad, Feeling Good"

Feeling Bad, Feeling Good:

1. Everybody feels bad at times; it's a perfectly normal feeling.
  - Boredom
  - Fright
  - Anger
  - Loneliness
2. Just as it is normal to feel bad every now and then, it is normal to have good feelings, too. Most of the times when things are going great, you don't think about feeling good, you just do. What do you do to feel good? Are most of the things that help you feel good things that make you responsible? Can drugs give you these same feelings.

Teaching Strategy

1. Review contents of fourth and fifth grade programs. Discuss and help the class evaluate information shared by individuals in terms of accuracy.

Before Showing the Filmstrip

1. Ask the class to help you identify different kinds of good and bad feelings. (Good feelings might include feelings of happiness, accomplishment, affection, relaxation, gaiety, quiet reflection, elation, and total involvement in some activity they enjoy. Bad feelings might include feelings of loneliness, anger, sadness, rejection, boredom, confusion, and embarrassment.) While the students will of course use different words to describe many of these feelings, the important thing is for them to start separating and giving names to their emotions.
2. Discuss with the class the different ways in which both good and bad feelings are related to behavior. (How does a person act when he is experiencing one of the feelings mentioned above?)
3. Ask your students if there are certain things they do better when they are happy, or worse when they are sad.

At the Discussion Break

1. Ask students to describe experiences they may have had that are similar to ones portrayed in the first half of the filmstrip.

2. How have they learned to cope with bad feelings? What, for example, might a person do if he is frightened by something, or finds himself left out by a group, or has a fight with his brother or sister? The idea here is to get your students to communicate with each other about their feelings and, in effect, show each other that on the emotional level they all have something in common. As an adult, you may want to mention bad feelings you have had and ways you have coped with them.

### After Showing the Filmstrip

1. Review the sequences in the second half of the filmstrip and discuss with the class what it is about sleigh-riding or kite-flying or playing with friends that makes a person feel good.
2. Ask why it is that at some time or other everyone likes to go off alone and sit quietly with his or her thoughts.
3. Discuss the idea of taking drugs to feel good vs. the ability to feel good naturally. (Is it okay to take drugs if you can't find any other way of making yourself feel good?) The idea in 3 and 4 is to start students thinking about the importance of being personally responsible for their physical and psychological well-being.

### Additional Class Activities

1. See Fourth and Fifth grade listings of other activities.
2. In each of the following situations (you can invent many more of your own), have your students react verbally as to how they would feel.
  - a. One of the boys in class keeps bragging about how strong and brave he is.
  - b. After working on an arithmetic problem for a long, long time, you still can't figure it out.
  - c. It's raining outside, you've just had a fight with your brother, and you have no one to play with.
  - d. Your best friend just told you he thought you were the best person in the whole world.
  - e. You just received two tests back from the teacher -- A+ in Math, and 50% in Social Studies.

A Unit on Smoking  
For Sixth Grade Classes

As more and more medical people and research people become convinced of the harmful effects of smoking, they also become convinced that changing the habits of adults is not feasible. The hope lies with the children.

Children in sixth grade are at the prime age for this knowledge. The incidence of smoking at this age is rising. We must reach the children before they enter their adolescent years.

This unit has been prepared so that each sixth grade teacher can present pertinent facts with a minimum of personal effort. Included in the unit package are:

1. A tape recording
2. A filmstrip and tape to be played with it
3. Eight different posters for classroom use
4. Individual booklets for pupils
5. Detailed teaching plans for three days
6. Suggestions for use if desired to extend the unit for another day or two

All materials except item number four should be placed back in the box before it is sent along to the next teacher on the routing sheet.

This unit has been prepared with the idea of objectivity in mind. None of us should condemn people who smoke. Our job is to encourage pupils to have the knowledge and will power to avoid smoking.

A Unit on Smoking  
For Sixth Grade Classes

- Purpose - To present a planned program of factual information on smoking so that boys and girls will be helped to make a decision based on the best information available and have the best opportunity possible for long, healthy lives
- Aims - Through factual and discrete teaching of this unit teachers will be able to:
1. develop an understanding of the immediate and ultimate effects of smoking,
  2. develop an awareness of subtle propaganda as used in smoking advertisements,
  3. give children an insight into adult viewpoints on smoking,
  4. encourage children to make the best decision about smoking
- Objectives - At the conclusion of this unit children should have sound knowledge of:
1. the dangers of smoking,
  2. the importance of refraining from smoking when participating in athletics,
  3. the reasons people start smoking and the difficulty people have in stopping,
  4. the fact that they each have to decide whether or not to smoke and whether it is necessary to smoke to be "grown up"
- Procedure - First Day - Introduce the unit by giving each pupil a copy of the questionnaire (which you have discussed in advance). Comment that you are not trying to pry into secrets, but that you wish to get their ideas. Names on the questionnaires are not necessary and no grades will be given for them.

Give the class ten to fifteen minutes and collect the papers

Questionnaire

1. Do you know any sixth grade students who smoke?
2. Do you know any middle school students who smoke?
3. Do you think that there are more middle school students than sixth grade students who smoke? Why do they start smoking?
4. Would it be easy to stop smoking once you have started? Why? Why not?
5. Can we believe advertisements about smoking?
6. Do most coaches have strict rules about smoking? Why? Why not?

After you have collected the papers discuss the first three questions. Briefly touch upon the last three questions as you encourage the students to go home and get additional information about the last three questions from an adult.

## (Teacher's Information)

1. Cigarette smoking is a health hazard of sufficient importance to warrant immediate action, according to United States Health Service
2. Smoking contributes to death from certain specific diseases (lung cancer) and to the overall death rate.
3. Lung cancer has increased at an alarming rate closely paralleling the increase of cigarette sales.

## (Teacher's Usage of Questionnaire)

1. Bring out the children's ideas on whether any sixth grade students smoke, and if so, why?
2. Use papers as basis of discussion about smoking in the middle school.
3. Elicit their thoughts on when they will be faced with the important decision whether or not to smoke.
4. Inform them that the class will be talking about smoking for a few days and that they should consider all sides of the matter.

## Homework assignment after first day discussion:

1. Make suggestion that the class will have a bulletin board and students are to look over magazines and newspapers to find advertisements and articles on smoking. These will be discussed on second day lesson
2. Pupils should talk with at least one adult to find out: If adult smokes, when did he start? Why? Has he ever tried to quit? Why? Did he quit?

## Second day:

Begin the lesson with a continuing discussion on the last three questions on the questionnaire. Include in this discussion any adult's viewpoint that students have found in talking with adults.

When discussing Question 4 use any articles the children or you may have about people who have stopped smoking, or who have never begun to smoke.

When discussing Question 5 evaluate the advertisements brought in by students. Point out the fact that athletes are no longer permitted to endorse cigarettes. In discussing ads, consider these questions: In advertising smoking, do the advertising companies attempt to make one believe that smoking will:

1. Improve your appearance
2. Make you socially acceptable
3. Erase nervous tensions
4. Do little harm if you smoke a filter cigarette
5. Make you more grown up



When discussing Question 6 allow several pupils to give their opinions on what coaches say.

Tell them that viewpoints may differ among coaches, and that since most of the pupils will be going to North Allegheny High School, it should be interesting to hear what North Allegheny coaches say.

Inform the pupils that the tape you have is an interview with the following coaches:

Play the tape (about 12 minutes in length at 3-3,4 speed) and allow discussion afterward. For Discussion Guide for Tape - see last page.

Third day:

Begin the lesson with filmstrip "I'll Take the High Road". The purpose of this color-sound filmstrip and tape combination is to inform young people (about 12 years old) about the risks of smoking before they start to smoke.

After the filmstrip and tape allow class discussion to bring out the following facts.

Physical effects of smoking upon the young smoker

1. Nicotine is a poison
2. Smoking leaves bad taste in the mouth
3. Smoking makes the breath smell badly
4. Smoking lowers athletic performance
5. Smoking causes shortness of breath, rapid pulse, irritated lung linings
6. In habitual smoking when the stomach is empty, there is a tendency to produce digestive disturbances and distress

(Teacher's Information) Chain of events that take place when deeply inhaled cigarette smoke sends a threat of premature death spreading through the lungs, arteries, and heart.

The smoke irritates the cells that line the finest chambers of the lungs. The walls of the lungs thicken and lose some of their ability to exchange oxygen for carbon dioxide. A cough or sneeze may rupture the wall and part of the lung becomes useless. The smoke also damages the small arteries that carry blood to the lung surface. Many of the small arteries become blocked. These two events increase the blood pressure in the pulmonary arteries and put a strain on the right side of the heart. This prompts the other side of the heart to work harder to pump blood against increased resistance. While this is happening, carbon monoxide from the smoke combines with red blood cells and decreases their capacity to carry oxygen. Thus, the overworked heart is given less fuel to help it do its job. At the same time, tobacco's nicotine causes a constriction of the small arteries in the extremities. This speeds up the heart, increasing its need for oxygen.

### Supplementary Activities:

To continue a fourth day, or a fifth day, some interesting work can be done with the following ideas.

1. Have students collect pictures or make posters or slogans about smoking
2. Cost of smoking.
  - a. Figure the cost of smoking per week, per month, per year, if you would smoke one pack a day.
    - (1) What could you buy with that much money?
3. Statistics about smoking.
  - a. Use filmstrip statistics and any data brought in by students
  - b. Compute the number of pupils in the school who may get lung cancer if everyone smoked. If no one smoked.

### Note: (Teacher)

1. Chances of getting lung cancer - non-smoker is 1 in 270 - heavy smoker is 1 in 10.
2. Report of the Surgeon General's Committee on smoking stated that smoking cigarettes is injurious to health and causes or contributes to the following:
  - a. Lung cancer
  - b. Heart disease
  - c. Emphysema (a deadly lung disease)
3. Nicotine absorbed during smoking speeds up heart action and at the same time slows its blood supply by constricting the vessels supplying the heart. The same amount of exercise will speed up the heart more after smoking than without smoking. All of this puts a burden on circulatory system which handicaps it for the work it must do in activities of all kinds that demand endurance. Check pulse after sitting quietly for 30 minutes. Check pulse of person who has smoked on cigarette.
4. If you, or some adult, will take a puff from cigarette (as the pupils watch) and exhale the smoke through a clean, white cloth, visual record on the cloth will be interesting.

DISCUSSION GUIDE FOR AN ELEMENTARY SCHOOL ANTI-SMOKING TAPE RECORDED PROGRAM

1. Introduction of the panel
2. Statements of purpose for the discussion:
  - a. Point out the harmful effects of smoking for persons wishing to participate in athletics.
  - b. Disclose personal experiences with students who tried to smoke while participating in athletics.
  - c. Offer suggestions to students on how to avoid the smoking habit.
3. Discussion:
  - a. How does smoking make it difficult for boys and girls to take part in sports?
  - b. What effect does smoking have on the human body?
  - c. Do you believe smoking prevents students from belonging to certain high school groups (outside the sports field)?
  - d. Have you ever known a person who smoked while playing on a team? Was he able to perform well? As well as if he had not smoked?
  - e. Can you suggest ways for boys and girls to avoid starting to smoke?
4. SUMMARY:  
(Mr. Hartswick)

Intermediate  
Suggested Vocabulary

The teacher is requested to maintain a vocabulary listing of human growth and development terms which are commonly used by student at his or her own grade level.

### Pre-Film Activities

1. Tell children they have probably gathered some incorrect information and encourage them to straighten it out.
2. Gradually introduce ideas in the film. Tell the children about the film a day before (perhaps in grade six there could be a preview committee); guide the children in ideas and concepts to look for.
3. Use the film to lead into a discussion. Begin leading questions to avoid embarrassment. Be convincingly permissive, honest, and straightforward in approach and answers. Use technique of counter questioning to stimulate thinking.

## Activities

## Intermediate

1. Reproduction and animal needs and habits can be experienced through classroom pets and aquarium life; small animals on a terrarium are excellent for classroom experience on life cycles. Discuss children's experience with pets.
2. Growth uses energy. Have bulletin board displays or make booklets on needs of body and guides for personal hygiene.
3. Have the children bring pictures of themselves as babies. Have a "Guess Who" bulletin board. Have them note ways they've changed as they have grown.
4. Make a "how tall" chart (one is available from Travelers Insurance Company, Hartford, Conn.). Draw a graph of the height range in the class.
5. Give the children a chance to present and organize ideas in buzz groups.
6. Have children bring in pictures of children from different age groups. Note differences in heights and weights. This can also be done with adults.
7. Study famous people. Find out their height. This reassures non-average children.
8. Have the children do an art project of drawing pictures to express emotion (abstract or concrete) and do a follow up picture of controlling that emotion.
9. Record heights and weights for at least a month. Graph month to month change. Compare with class members and graph an average growth.
10. Have the children participate in role playing activities. Have them act out roles expressing family trees, relationships with peers, etc.
11. Give children a sample problem and have them act out how to solve it. For example, what would a person say to a young person who is worried because he is not growing as tall or heavy as he would like.
12. Have each student make a list of his inherited characteristics and then trace these back through his family. This will help him distinguish between acquired and inherited characteristics.
13. Study cross breeding in corn.
14. Have the children draw a simple figure to scale representing their own height. A scale of three inches to one foot is suitable. Display these on a bulletin board.

15. Have the children bring in individual snapshots of themselves taken when they were two to four years old, and in which their facial features are clearly visible. Have them bring in current photos or take small group pictures. Let children see if they can identify childhood snapshots of each other by comparing facial features with those in current pictures.
16. Have children write essays on topics concerning their emotions.
17. Keep a problem box in the classroom where students can deposit brief descriptions of problems they have in getting along with people of their own age. These can be explored through class discussions or role playing.
18. Have children make a checklist for safety in the home. Have him note hazards which exist in his home.
19. Discuss habits and list good habits or bad habits and how to break bad habits.
20. Let the children observe onion skin cells, epithelial or protozoa cells, under the microscope.
21. Have the children experiment with cross pollination by transplanting pollen from a stamen of a flower to the pistil of another flower of the same species. Cover with plastic to prevent accidental pollination.
22. Let the pupils cut open the pistils of different kinds of flowers, ovaries and ovules. Let them record what they observe.
23. Have pupils soak a few beans and cut them open to examine the embryos.
24. Show the pictures of men and women congregated as at a social gathering. Help the pupils to note that most men are taller and heavier than women, and that they have broader shoulders and coarser features (in general, but everyone is an individual and characteristics sometimes overlap).
25. Invite a school nurse or public health nurse to describe the care which a woman needs during pregnancy and after her baby is born.
26. Have a pair of twins from the school visit the class and tell interesting experiences they have had.
27. Lead a discussion on the placement of ear lobes as an inherited characteristic, and let pupils note whether the lobes hang free or are closely attached to the head. Bring out that a free hanging ear lobe is a dominant characteristic.
28. Discuss color deficiency (red-green color blindness) and that it may be due to recessive gene in the X chromosome and that this deficiency is quite common affecting approximately two out of twenty-five men and a somewhat lower proportion of women. Bring out that the degree of deficiency varies with different individuals, but that all need to make appropriate adjustments.

29. Have pupils discuss how they can take advantage of their inherited traits as in participating in sports and in preparing for certain vocations and activities in life.
30. Sample topics for discussion or writing:
- a. What makes you happy?
  - b. What to do when you are angry?
  - c. What things bother you when you feel bad?
  - d. The happiest day I ever had.
  - e. The things that make me happy.
  - f. The things that make me sad.
  - g. What I did last time when I was angry.
  - h. Things I do by myself when there is no one to play with.
  - i. What things hurt my feelings.
  - j. What I do when my feelings are hurt.
  - k. What it means to be a good sport.
  - l. What does it mean to be popular.
  - m. Ways of being popular with friends.
  - n. How habits help us.
  - o. How to form and break habits.
  - p. Ways of showing love and respect for others.



Intermediate  
Required Resources

Filmstrips

1. What Are Drugs - Grades Four, Five, Six
2. Outside Influences - Grades Five and Six
3. Feeling Bad, Feeling Good - Grade Six
4. I'll Choose the High Road - this filmstrip and accompanying tape discuss the relationship between cigarette smoking and cancer, and several other health complications. Sponsored by the American Cancer Society - Grade Six

Films

1. Human Growth, E. C. Brown Trust presents biological facts of sex as part of human growth and development. Grade Six (teacher's manual) - 20 minutes - color.
2. The Story of Menstruation - 12 minutes - Grade Five
3. Wonderful Being a Girl - 20 minutes - Grade Five

Books

Dimensions of Personality Series:

1. Here I Am - Grade Four
2. I'm Not Alone - Grade Five
3. Becoming Myself - Grade Six

Suggested Resources

1. Growing Up, McGraw Hill Book Co. Uses silhouette and animated photography to observe the growth of twins. 11 minutes.
2. Everyday Courtesy, Churchill Films. Courtesy in connection with invitations, telephone conversation, introductions, and entertaining guests. 11 minutes.
3. Girl to Woman, Churchill Films. Deals with human growth and development during turbulent change from girlhood to womanhood. Describes male as well as female reproductive organs. 16 minutes.

4. Boy to Man, Churchill Films. Shows physical changes of adolescent as well as complete glandular development. 16 minutes - color.
5. Miracle of Reproduction, Sed Davis. Similarities in growth and development of fish, chickens, cows, and human beings.
6. Human Heredity, Brown Trust Co. Basic facts and principles concerning heredity and influence of culture and environment on behavior and attitudes. 15 minutes.
7. The Thread of Life, American Telephone and Telegraph. Two reels, 40 minutes each.
8. The Human Machine - 15 minutes - color.
9. World of a Girl - 18 minutes - color.
10. Wonder of Reproduction - 13 minutes - color.
11. Hemo the Magnificent, Bell Telephone. Story of Circulation, 2 reels, 30 minutes each - color.

#### Booklets for the Pupil

1. Dickerson, Roy - Into Manhood, New York: Association Press, 1954.
2. Growing Up and Liking It, Milltown, N. J.: Personal Products Corp.
3. A Boy Today - A Man Tomorrow, St. Louis: Optimist International, 1961.
4. The Human Story, Scott Foresman and Co.
5. A Story About You, American Medical Association, 1962.

## Teacher Resources

1. Calderwood, Deryck, "Adolescents Views on Sex Education" in Journal of Marriage and the Family. Vol 27, No. 2 May, 1965
2. Gagnon, John H., "Sexuality and Sexual Learning in the Child" in Psychiatry, Vol. 28, No. 3, August, 1965.
3. Manley, Helen, A Curriculum Guide in Sex Education, State Publishing Co , St. Louis, Mo.
4. Rottenberg, Isaac, Sex Education and My Child, in Presbyterian Life, Page 13, October 1, 1968.
5. Family Life and Sex Education, November 15, 1966 A Bibliography from the Educational Training and Dissemination Bureau of Research
6. Growth Patterns and Sex Education, The Journal of School Health, May, 1967. Vol. XXXVII, No. 5A. (A suggested program K-6) with bibliography of resources by grade level.
7. NAIS on Sex Education, A Summary Report by Edward Yeomans. National Association of Independent Schools, August, 1966
8. "Sex Education" in The Instructor, August/September 1967, Page 132. (Includes bibliography of resources.)
9. "The Truth About Sex Education" in The Saturday Evening Post, June 29, 1968, Page 23.
10. Sex Information and Education Council of the United States Newsletter, 1790 Broadway, New York, New York 10019. (Reprints and publications available Bibliography of resources available also).
11. Fertilization and Birth, E. C. Brown Trust. This film is to be used as a supplement to the required films. It includes an explanation of the reproductive system of fish, followed by a simple presentation of the human reproductive system and its function. End scenes include birth and suckling of the young in both animals and humans. 11 minutes - color

## Selected Organizations Where Assistance May Be Obtained

1. American Academy of Pediatrics  
1801 Hinman Avenue  
Evanston, Illinois 60204  
"Selected References on Sex Education"
2. American Association of Health, Physical Education and Recreation  
(Health Division)  
Dr. Carl A. Troester, Jr., Executive Secretary  
1201 Sixteenth Street, N. W., Washington, D. C. 20036
3. American Medical Association  
535 North Dearborn Street  
Chicago, Illinois 60610  
Sex Education Pamphlets
4. American School Health Association  
A. O. DeWeese, M. D., Executive Secretary  
515 East Main Street, Kent, Ohio
5. American Social Health Association  
Earle G. Lippincott, Executive Director  
1790 Broadway, New York, N. Y. 10019
6. American Social Health Association  
1790 Broadway  
New York, New York 10019  
Venereal Disease and Family Life Education
7. Local Social Health Associations
8. National Council on Family Relations  
Ruth H. Jewson, Executive Officer  
1219 University Avenue, S. E.  
Minneapolis, Minnesota 55414
9. Sex Information and Education Council of the United States  
Mary S. Calderone, M. D., M.P. H.  
Executive Director  
1790 Broadway, New York, New York 10019
10. School Health Education Study  
Dr. Elena Sliepcevich, Director  
1201 Sixteenth Street, N. W.  
Washington, D. C. 20036

NORTH ALLEGHENY SCHOOL DISTRICT

HUMAN GROWTH AND DEVELOPMENT

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APPENDIX

Instructional and Reference Materials for:

Seventh Grade Health	A 1
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Twelfth Grade Sociology	A 5
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## NORTH ALLEGHENY SCHOOL DISTRICT

## HUMAN GROWTH AND DEVELOPMENT

Grades 7 - 12

Seventh Grade HealthObjectives

1. The student should understand the necessary, normal, physical and emotional changes which constitute adolescence in boys and girls, and their purpose. Among such understandings should be:
  - A. Menstruation
  - B. Seminal emission
  - C. Figure and voice change
  - D. Increased emotional changes are normal
2. The student should be able to relate the changes of adolescence and his new awareness of sexuality to the basic principles of human development. He should understand the part of man and woman in conception, and their influence on the child genetically and as an environmental factor.
3. Both sexes should understand (prenatal) development and childbirth. They should also see their sex as a small integral and important aspect of their total being rather than as a separate mysterious entity.
4. The student should be capable of handling himself satisfactorily in a variety of social situations within the home, school and community.
5. The student should be aware of his role in the family and his responsibility to it.
6. The student should exhibit a concern for his own individuality including an understanding of his needs as related to those of others around him. He should be acquainted with the importance of a well-groomed appearance, sound attitudes and extensive planning to his future role in life.
7. The student should understand the purpose, benefits and problems involved in dating situations. He should know basic dating etiquette and manners for both sexes as dating grows to more mature stages.
8. The students should develop a wholesome attitude in the discussion of the human body, human reproduction, and human growth.
9. The student should realize that present behavior influences future health.
10. The student should be aware of elementary information concerning the physiological and possible psychological effects of drugs upon the user.

The student should know that drugs are classified according to their pharmacological action.

12. The student should know that drug products and chemical substances, when misused, can cause serious problems, even permanent damage.
13. The student should recognize that people misuse drugs for many reasons.
14. The student should recognize that health should be safeguarded throughout life; to develop practices that will protect and preserve health.

#### Guidelines for the Teachers:

1. Emotional changes resulting from sexual development should be kept in perspective.
2. Understanding should be developed with concern for modesty.
3. The infringement of the privacy of one's home should be discouraged.
4. The student should understand the purpose, benefits, and problems involved in datings situations appropriate for their age.
5. The discussion should center on the factual material and discourage individual value judgements related to human body, human reproduction, and human growth. Slang terminology should not be a part of the discussion and care should be taken not to infringe on one's modesty.
6. Be most careful of stated or implied concepts which tend to downgrade the influence of the home. Promote good rapport between the child and the family.
7. The behavioral aspect of sex acts should not be a part of classroom discussion.
8. In classroom discussion, students should have the opportunity to verbalize freely and exchange ideas with their classmates so that an atmosphere exists in which a student feels secure in seeking assistance if a drug problem arises.

#### Content

- I. Physiological Aspects (for this content unit boys and girls should be taught in separate groups).
  - A. Adolescence in boys and girls
    1. Physical changes - internal and external
      - a. Menstruation, seminal emissions
    2. Emotional changes
  - B. Human Development
    1. Male reproductive system
    2. Female reproductive system
    3. Conception
    4. Prenatal development
    5. Childbirth
    6. Birth defects and problems
    7. Inherited qualities - the genetic makeup
    8. Environmental factors

## II. Social Aspects

- A. Personality is an individual's total make-up which is subject to change
  - 1. Origins of personality
    - a. Heredity - chromosome make-up
    - b. Environment - one's total surroundings
  - 2. Character of the personality
    - a. Made up of positive and negative traits
      - (1) Develop positive traits
      - (2) Overcome negative traits
- B. Health attitudes
  - 1. Proper mental development
    - a. Making the most of one's mental capability
    - b. Growth through educational opportunities
  - 2. Physical development
    - a. Proper habits of personal hygiene
    - b. Adequate sleep, rest, diet and exercise
    - c. Personal appearance - basic grooming, dress and cleanliness
  - 3. Emotional development - a means of communication
    - a. Positive feeling towards others
    - b. Getting along with parents
    - c. Responsibilities to the family
    - d. Understanding family rules, customs and behavior
    - e. Proper attitudes at home, school and community
  - 4. Social development
    - a. Respects rights and feelings of others
    - b. Expects others to like and appreciate him
      - (1) How to make and keep friends
      - (2) Boy and girl friends
      - (3) Socializing - parties, dances
    - c. Assumes full share of responsibility
    - d. Sense of worth, self-confidence, and self-respect
    - e. Has skill in thinking, acting and making proper decisions as a member of the group
      - (1) Special activities - organized clubs, competitive sports, recreational sports
- C. Harmful attitudes
  - 1. Misuse of drugs can harm the individual
    - a. A person may become psychologically and/or physically dependent upon drugs
    - b. The person becoming physically dependent upon drugs can become physically ill
    - c. A person may require increasing amounts to get the same desired effect
    - d. Drugs can affect every system of the body, and death can result from overdose
  - 2. Many drugs are valuable to man but when improperly used they are subject to abuse.
    - a. Amphetamines (pep pills, speed)
      - (1) Medical uses: prescribed by doctor



- (2) Psychological dependence can develop
  - (3) Possible danger of abuse
  - b. Barbiturates (sleeping pills; goof balls)
    - (1) Medical uses prescribed by doctor
    - (2) Tolerance is created, physical and psychological withdrawal is dangerous
    - (3) Possible danger of abuse
  - c. Tranquilizers (Miltown, Equanil)
    - (1) Medical uses, prescribed by doctor
    - (2) Physical and psychological dependence
    - (3) Possible dangers of abuse
  - d. Cocaine (coke, procaine, novacaine)
    - (1) Medical use - local anesthetic
    - (2) Produces psychological dependence
    - (3) Possible danger of abuse
  - e. Opiate (opium, morphine, codeine, heroin)
    - (1) Medical use prescribed by doctor
    - (2) Physical and psychological dependence
    - (3) Possible dangers of abuse
  - f. Hallucinogens (psychedelics, L.S.D., DMT)
    - (1) Medical use in the experimental stages for mental disorder
    - (2) Psychological dependence and tolerance created
    - (3) Possible dangers of abuse
  - g. Marijuana
    - (1) Medical use - none
    - (2) Psychological dependence and tolerance are being investigated
    - (3) Possible dangers of abuse
  - h. Volatile chemicals (airplane glue, freon, cleaning and lighter fluid, gasoline)
    - (1) Medical use - none
    - (2) Psychological dependence - tolerance created
    - (3) Possible dangers of abuse
3. Use of tobacco
    - a. Effects on the body
    - b. Effects on society
  4. Use of alcohol
    - a. Effects on the body
    - b. Effects on society
  5. Venereal disease

### Vocabulary

Menstruation	Environment	Placenta	Amphetamines	Fetus
Seminal emission	Family	Uterus	Pep pills	Umbilical cord
Conception	Postnatal	Embryo	Sleeping pills	Hallucinogens
Prenatal	Dependence	Society	Toxic solvents	Tranquilizer
Tolerance	(psychological)	Barbiturate	Etiquette	Venereal disease
Hereditiy	(physical)	Opiate	Marijuana	

### Class Activities

#### Panel discussion on teenage behavior

- A. Boy-girl relations - dating
  1. Kinds of dates - socializing, parties, dances
  2. Behavior and responsibility - acquiring a date, accepting or refusing, do's and don'ts on a date, and responsibilities on a date.
- B. In classroom discussion students should have the opportunity to verbalize freely and exchange ideas with their classmates so that an atmosphere exists in which a student feels secure in seeking assistance if a drug problem arises.

Ninth Grade - Social StudiesObjectives

1. The student should understand the functions of dating and courtship, and come to view it as part of the growth of an individual toward a stable, permanent, mutually beneficial relationship with another individual.
2. He should develop the ability to see and understand sex and physical desire as a normal aspect of larger whole, a lasting relationship with a member of the opposite sex. He should also be able to think clearly and speak openly concerning moral problems.
3. To help students formulate the proper attitude in choosing a mate. The home and culture from which the student comes should be taken into account when establishing these attitudes and moral values.
4. Help the student establish meaningful interpersonal relationships with members of both sexes.
5. The students should be aware of the responsibility for self-control in dating relationships.
6. The student must have a willingness to establish limits for personal behavior and to accept responsibility for adhering to those limits.
7. The student should have a clear understanding that the use of drugs is prohibited by law. It should also be established that the sale of drugs is controlled by the Federal Government.
8. The student should be aware of the harmful effects of tobacco and alcohol as well as the legal control, sale, and usage.
9. The student should understand the distinction between essential, legitimate use of drugs and their abuse.
  - A. Motivation to misuse drugs
  - B. Enforcement problems
  - C. Rehabilitation problems
  - D. Social and economic implementations
10. The student should understand and appreciate that a healthy person does not need drugs as an aid to performing everyday activities.
11. The student should recognize that drugs when misused cause serious problems to himself and society.

Guidelines for the Teachers

1. Our social customs and laws should be emphasized as compared and contrasted with other cultures, social customs and laws.
2. The social problems covered in this unit should be emphasized as effects of human problems rather than causes.
3. Discussion of these problems should be relative to the impact they have on society.

## Content

- I. Boy - Girl Relationship
  - A. Dating
    1. Purpose of dating
    2. Kinds of dating experiences
      - a. Double dating
      - b. Single dating
    3. Choosing a date
    4. Arranging for a date
    5. Parental problems
    6. What to do on a date
      - a. Responsibilities of boys
      - b. Responsibilities of girls
    7. Natural physical attraction
      - a. Normal attraction of opposite sex
      - b. Need for responsibility and self-control
  - B. Courtship
    1. Factors to be considered in choosing a mate
      - a. Religion
      - b. Appropriate behavior
      - c. Family attitudes
      - d. Health
      - e. Responsibilities
      - f. Pros and cons of going steady
      - g. Developing personal habits for controlling behavior
      - h. The importance of knowing ones limitations
      - i. The concept of mutual respect
      - j. Standards set by our society
        - (1) Laws
        - (2) Family custom
        - (3) Religion
- II. Social Problems confronting society (Tobacco, Alcohol, Drugs, Venereal Disease)
  - A. Prevention
    1. Well adjusted personality is the best prevention
    2. The adequate understanding of ones' self
      - a. The nature of personality
      - b. Emotional and social development
  - B. Effect on society
    1. Anti-social behavior (illegal activity)
      - a. The cost in economic terms
      - b. The cost in human terms
      - c. Influence of organized crime
  - C. Federal and international laws
    1. Tax laws
    2. Prohibition laws
    3. Advertising laws
    4. Criminal statutes (felonies)
  - D. State and local laws
    1. User laws (misdemeanors and felonies)
    2. Marketing laws
      - a. Illegal sales (age, place, time, etc.)
      - b. Marketing control laws (LCB, etc.)
    3. Law Enforcement

- E. Treatment and rehabilitation centers
  - 1. Private agencies
    - a. Alcoholics Anonymous
    - b. Halfway Houses
    - c. Community-sponsored centers (hospitals)
  - 2. Public agencies
    - a. Mental Health
    - b. Federal drug centers
    - c. HEW and OEO projects
    - d. Local, State and Federal Welfare Agencies
- F. Economic factors dealing with family life
  - 1. The ability to earn
  - 2. Status symbols
  - 3. Conflict of different economic backgrounds
- G. Are solutions possible?
  - 1. Personal codes of behavior
  - 2. Cultural patterns in society
  - 3. Role of mass media
  - 4. Pressures of status and peer group influences
  - 5. Attitudes toward a life style

### Vocabulary

Endocrine	Sexual expression	Emotion
Society	Etiquette	Alcoholism
Infatuation	Behavior	Drug
Social Maturity	Attitudes	Rehabilitation
	Puberty	Legal control

### Activities

1. Have the students list ways in which they deceive themselves in order to meet some uncomfortable situation.
2. Discuss ways adolescents have of showing their need to be accepted by or belong to their peer group.
3. Have a question box and invite students to submit questions or problems they have about things they fear. Use these questions for class discussion.
4. Discuss what kind of behavior students expect of their dating partners.
5. Have a debate on the advantages and disadvantages of going steady.
6. Develop a panel discussion on the proper control of drugs, alcohol and tobacco.
7. Have psychologist or psychiatrist as a guest speaker on various emotional issues, including homosexuality (class size groups or smaller are desirable).

## NINTH - TENTH GRADE BIOLOGY

Objectives

1. The student should understand that reproduction is a necessary body function that takes place in all forms of organisms.
2. The child should be able to differentiate between the two basic methods of reproduction.
  - A. Asexual - the splitting of one cell
  - B. Sexual - the union of two separate cells
3. Knowing that reproduction results from the union of two specialized cells, he will distinguish between:
  - A. Isogametes - union of like cells
  - B. Heterogametes - union of unlike cells
4. The student should know that plants as well as animals have sexual reproductive cycles.
5. Have a clear knowledge of organisms that are able to reproduce by parthenogenesis.
6. Discuss the advantages of external fertilization versus internal fertilization.
7. The student should understand the three types of birth following fertilization.
  - A. Oviparous
  - B. Ovoviviparous
  - C. Viviparous
8. The student should be able to discuss the function of the various parts of the male and female reproductive systems.
9. The student should know the function of the pituitary gland on the menstrual cycle. The effect of the following:
  - A. Follicle stimulating hormone
  - B. Lutenizing hormone
  - C. Luterotropic hormone
10. The ovary's role in the menstrual cycle
  - A. Ova
  - B. Estrogen
  - C. Progesterone
11. A complete understanding of the relationship between the pituitary gland and the ovary in the production of an ova should be known.
12. The student should be able to outline the events that occur during the estrogen cycle.
13. The student should know what physiological change takes place if fertilization does not occur.

14. After fertilization occurs the student should be able to trace the various stages of embryonic development.
  - A. Cleavage
  - B. Blastula stage
  - C. Gastrula stage
  - D. Development of the cell layers
15. A comparative study should be made between human and some other organism as to early embryonic development.
16. Encourage students to discuss reproduction in scientific terminology and develop mature attitudes toward sexual reproduction.

### Content

- I. Asexual Reproduction
  - A. Binary fission
  - B. Budding
  - C. Sporulation
- II. Sexual Reproduction
  - A. Conjugation
    1. Isogametic
    2. Heterogametic
  - B. Alternation of generation
- III. Reproduction in Animals
  - A. Parthenogenesis  
Hermaphroditism
    1. Cross-fertilization
    2. Self-fertilization
  - C. External fertilization
  - D. Internal fertilization
    1. Oviparous
    2. Ovoviparous
    3. Viviparous
- IV. Human Reproduction
  - A. Development of the female system and function of each
    1. Ovary
    2. Ovum
    3. Fallopian tube
    4. Uterus
    5. Vagina
    6. Bladder
    7. Urethra
  - B. Development of the male system and function
    1. Testes
    2. Vasdeferens
    3. Seminal vesicle
    4. Prostate
    5. Cowper's gland
    6. Penis

- V. Ovulation and the menstrual cycle.
- A. Pituitary gland
    1. Follicle stimulating hormone
    2. Lutenizing hormone
    3. Luteotropic hormone
  - B. Ovary
    1. Ova
    2. Estrogen
    3. Corpus luteum
    4. Progesterone
  - C. Menstrual cycle
  - D. Fertilization
  - E. Implantation
  - F. Embryonic Development
    1. Cleavage
    2. Blastula stage
    3. Gastrula stage
    4. Ectoderm development
    5. Endoderm development
    6. Mesoderm development
    7. Fetus
    8. Gestation period
    9. Birth
    10. Care of the young
      - a. Nursing
  - G. Function of Body Systems

### Vocabulary

Sporulation	Uterus	Follicle
Conjugation	Urethra	Lutenizing
Hermaphroditic	Vagina	Luteotropic
Parthenogenesis	Fallopian tubes	Progesterone
Oviparous	Prostate	Menstruation
Ovoviparous	Cowper's gland	Ovulation
Viviparous	Penis	Implantation
Ovary	Seminal vesicle	Fetus
Ova	Testes	Gestation

### Classroom Activities

1. Microscopic examination of slides showing cleavage.
2. Effects of testosterone on secondary sexual characteristics.
3. Inject pituitary gland into female to cause ovulation.
4. Fertilize egg artificially with sperm removed from male frog.
5. Using modeling clay have student mold the various stages of cleavage.

## TENTH GRADE HEALTH

### Objectives:

1. The student should be able to understand the physiology, development and functions of the male and female reproductive systems.
2. He should be capable of identifying the stages of prenatal development from conception through pregnancy, labor and delivery. He should also exhibit understanding of various complications which might occur such as the Rh factor, influence of health of the mother, miscarriage, etc.
3. The student should be aware of various personal and social problems and ramifications of pregnancy and reproduction including:
  - A. The physical and mental aspects of pregnancy for husband and wife
  - B. The importance and scope of prenatal medical care
  - C. The definition of birth control
  - C. The definition of abortion (therapeutic and illegal) and inherent dangers.
4. He should develop the ability to see and understand sex and physical desire as a normal aspect of a larger whole, a lasting relationship with a member of the opposite sex. He should also be able to think clearly about the problem areas such as:
  - A. Venereal disease, cause, spread, cure
  - B. Drug abuse, and alcohol
  - C. Premarital intercourse and related behaviors
5. The student should know and appreciate that a healthy person usually does not need drugs as an aid to performing daily activities.
6. The student should recognize that drugs when misused cause serious social, physical, and psychological problems.
7. The student must know that individual responsibility is an important factor in effective drug control.
8. The student should know that there are laws governing the distribution and use of drugs.
9. The student should understand that they play a vital role in the solution to the drug problem.
10. The student should know the relationship of drugs to ones' total physical well-being.

### Guidelines for the Teachers:

1. Student seeking information related to methods of birth control should be referred to (parents, family physician, clergy or counselor).



2. The classroom is not the place for discussing the merit or lack of merit of laws and religion or other codes of behavior regarding abortion and premarital intercourse.
3. In the discussion of the area of homosexuality, care should be taken not to discuss the merit or lack of merit of existing laws and customs.

Content:

I. Mental Health

A. Behavior

1. Structure
  - a. Irritability
  - b. Reflex
  - c. Instinctive
  - d. Emotional
  - e. Intelligent
2. Different Levels
  - a. Habits
  - b. Mannerisms
  - c. Manners
  - d. Attitudes
  - e. Will power - self control
  - f. Conscience

B. Emotions

- |             |   |       |
|-------------|---|-------|
| 1. Love     | ) |       |
| 2. Fear     | ) | Basic |
| 3. Anger    | ) |       |
| 4. Anxiety  | ( |       |
| 5. Envy     | ( | Mixed |
| 6. Jealousy | ( |       |

C. Intelligence

1. Learning
  - a. Conditioned response
  - b. Operant learning
  - c. Trial and error
  - d. Creative thinking
2. Factors affecting learning

D. Mental Mechanisms

1. Nature of
2. Types
  - a. Rationalization
  - b. Projection
  - c. Repression
  - d. Displacement
  - e. Identification
  - f. Regression
  - g. Attention getting

## E. Neuroses

1. Normal and abnormal behavior
2. Mental illness
3. Stress and tension
4. Anxiety neurosis
  - a. Guilt
  - b. Fear
5. Hypochondriasis
6. Phobia
7. Depression
8. Obsession and compulsion

## F. Psychoses

1. Psychosis versus neurosis
2. Nature of
3. Schizophrenia
  - a. Types
4. Manic-depression
5. Psychotic depression
6. Treatment and prevention

## II. Physiological

## A. Review of male and female anatomy

1. Conception
2. Prenatal development
  - a. Genetic influence
3. Birth
  - a. Labor
  - b. Caesarean

## B. Further learnings - including discussion of various points of view concerning these issues and the importance of understanding and respecting the various points of view.

1. Prenatal medical care
2. Physical and emotional aspects of pregnancy
3. Abortion and miscarriage
4. Birth control
5. Homosexuality
  - a. Possible causes
    - (1) Environment (dominance)
    - (2) Emotional problems
  - b. Possible consequences
    - (1) Mental health problems
    - (2) Social rejection
    - (3) Employment problems
6. Venereal disease - filmstrip or film

## III. Drugs

## A. History of drug abuse

1. Ancient civilizations - 3000 B. C.
2. 17th Century - opium smoking recognized as serious problem in China
3. 1825 - morphine extracted from opium in Germany

- a. Uncontrolled use in military medicine
    - (1) Army disease - Civil War
    - (2) Franco - German War
  - b. First anti-opium law - City Ordinance San Francisco, 1875
  - c. First international effort for solutions 1909, 1912-1914
  - 4. 1874 - Heroin was developed from morphine in England
  - 5. 1903 - Barbiturates were introduced into medicine
  - 6. 1937 - A.M.A. report on evils of drugs
  - 7. By 1950 barbiturates and sleeping pills caused more deaths in U. S. than any other chemicals
  - 8. The amphetamines - synthesized, 1929 in California
    - a. Used widely during World War II
    - b. 1936 - Abuse of pep pills became evident on college campuses
  - 9. Marijuana - First usage was the hemp fibers for clothing - 5th Century B. C.
    - a. Ancient tribes inhaled smoke from burning marijuana
    - b. 500 A. D. Marijuana known throughout Europe
    - c. The use of hashish was recorded by Marco Polo
    - d. 1893 - Indian Hemp Drug Commission Report
    - e. Introduced into United States by Mexican laborers
    - f. 1937 - Marijuana Tax Act
    - g. 1944 - New York Report on marijuana usage
  - 10. Advisory Commission on Narcotic and Drug Abuse Report, 1963
  - 11. British Standing Advisory Committee Report on Drug Dependence, 1968
  - 12. The False Illusion
    - a. 1930 - The synthesis of Lysergic diethylamide acid - LSD
    - b. 1943 - First known person to ingest LSD
      - (1) Taken accidentally by its discoverer
      - (2) Recorded hallucinogenic effect of LSD
    - c. 1960 - Illegal production of LSD
      - (1) Use of LSD increased
      - (2) Harvard researchers used LSD on students
    - d. 1968 - Evidence of LSD changes chromosome make up
- B. The use of legitimate drug products
- 1. Medical tools prescribed by doctors
    - a. To prevent, control and treat illness and disease
    - b. To diagnose illness
    - c. To relieve pain
    - d. To aid in surgery
    - e. To aid in psychotherapy
  - 2. Self medication that can lead to abuse
    - a. To relieve minor aches and pains
    - b. To improve appearance
    - c. To treat imaginary defects
    - d. To combat fatigue
    - e. To induce sleep
- C. Social acceptance of drug usage is wide spread
- 1. Extensive use of prescription medicines
  - 2. Extensive use of non-prescription medicines
    - a. At festive occasions
    - b. A part of some religious rites
    - c. As a status symbol
    - d. As a means of relief from tension

D. Drugs of abuse and their effects

1. Narcotics - opium, morphine, codeine, heroin
  - a. Affects central nervous system
  - b. Changes emotional responses or reactions
  - c. Abuser becomes intoxicated
  - d. Physical and psychological dependence
  - f. Death can result from over dosage
  - g. Produces changes in behavior
    - (1) Addiction - a state of intoxication
    - (2) Habituation - no evidence of tolerance psychological dependence, no physical dependence
    - (3) Drug dependence - a state arising from repeated use of specific drug
2. Barbiturates - sleeping pills
  - a. Medical use, by prescription
  - b. Tolerance is created
  - c. Dependence - physical and psychological
  - d. Death from barbiturates higher than any other drug
  - e. Withdrawal can be very dangerous
3. Amphetamines - pep pills, diet pills
  - a. Medical use, by prescription
  - b. Dependence - psychological, not physical
  - c. Tolerance is created
  - d. Can be physically destructive
4. Hallucinogens - Psychedelics, LSD, DMT
  - a. Physical effects to the user
    - (1) Central nervous system, mind expanders
    - (2) Produces changes in mood and behavior
    - (3) Effect chromosome structure
    - (4) Tolerance - no clear medical evidence
    - (5) No physical dependence
  - b. Psychological dependence to the user
    - (1) Experiences anxiety, fear, panic
    - (2) Reaction unpredictable
    - (3) Delayed reactions can occur
5. Marijuana
  - a. Medical use - none in U. S.
  - b. Dependence - psychological, not physical
  - c. Abuse
    - (1) Sense of time, distance, vision, hearing may be distorted
    - (2) Ability to perform certain tasks may be impaired
  - d. Tolerance - no clear medical determination to date
  - e. Acts like alcohol
  - f. Has unpredictable effects
6. Other substances that may be harmful
  - a. Volatile chemicals
    - (1) Type of chemical
    - (2) Effect on the body

E. Alternatives to the use of drugs - guard against abuse

1. Importance of wise use of medication if needed
  - a. Avoidance of dangers of self medication
  - b. Restriction of drugs to their specific medical purpose

2. Peer acceptance should not depend upon drug misuse
  - a. Use of drugs to avoid problem solving is only temporary escape
  - b. Dangerous way of escaping from reality
3. Providing proper education about drugs
  - a. Require cooperation from community agencies, parents and students
  - b. Teaching the importance of respect for law and self control
  - c. Understand children and their problems
  - d. Avoid panic during a crisis, keep lines of communication open
  - e. The necessity of safeguarding health throughout life

#### IV. Smoking and Tobacco

- A. Definition
  1. What is tobacco?
  2. What is in tobacco?
- B. How widespread is the habit of smoking?
  1. How many people?
  2. How many cigarettes?
  3. How much money?
- C. Smoking habit and tobacco habit
  1. Smoking habit is mental
  2. Tobacco habit is a craving for tobacco
- D. Comparison of smoking cigarettes, pipe or tobacco
  1. Lung cancer
  2. Coronary heart disease
  3. Emphysema and bronchitis
  4. Increase in blood pressure
  5. Decrease resistance to disease
  6. Stomach ulcers
  7. Slows digestion (often ties in with weight loss)
  8. Stains teeth
  9. Fire hazard
  10. Dirty habit
  11. Cause of accidents
  12. Expensive
  13. Foul breath odors
- E. Tobacco and respiration
- F. Effect on heart and circulatory system
- G. Smoking and digestion
- H. Smoking and cancer
- I. Smoking and longevity

#### V. Alcohol

- A. How serious is the drinking problem?
- B. What is an alcoholic beverage? Stimulant? Depressant?
  1. Ethyl
  2. Methyl
- C. What are the beneficial uses of alcohol?
- D. Why people drink
- E. How does alcohol affect your body?
  1. Immediate effects
    - a. Heart and circulation
    - b. Nervous system

- (1) Reaction time
  - (2) Coordination (Muscle coordination)
  - (3) Confidence
  - (4) Senses (sight, hearing, etc)
2. Long-term effects
    - a. Heart, respiration
    - b. Liver
    - c. Resistance to disease
    - d. Diet
    - e. Overweight
    - f. Death
    - g. Psychological effects
- F. Alcohol and your life
1. Family life
  2. Crime
  3. Insurance risk
- G. Alcoholism
1. What is it?
  2. What makes an alcoholic?
  3. Attitudes toward alcoholics
  4. Prevention
  5. Treatment
    - a. Alcoholics Anonymous
    - b. Doctors
    - c. Hospital

### Vocabulary:

sexual maturity	menopause	withdrawal
conception	ovaries	opiate
Cesarean	pituitary	society
abortion	menstruation	sterility
miscarriage	gonorrhea	illegitimate
pregnancy	syphilis	prenatal
intercourse	prostitute	infatuation
venereal	homosexual	social maturity
endocrine	tolerance	postnatal
addiction	dependence	puberty
habituation	(psychological)	barbiturate
narcotic	(physical)	amphetamine
hormone	marijuana	hallucinogen
		tranquilizer

### Class Activity:

1. Guest Speakers:
  - A. An M. D. to answer questions concerning pregnancy, birth and anatomy.
  - B. Clergy to present various church customs and beliefs with regard to marriage.
2. Panel discussions:
  - A. Involve adults, students and clergy in discussion of student moral behavior.
  - B. Class panels on various pertinent topics.

3. Open discussion: Discussion will center on material covered in this unit. In the event that questions are submitted in writing, all said questions should be reviewed by the teacher before any discussion takes place. If questions arise which should not be discussed in the classroom, all such questions should be directed to reference material as listed.
4. Role-playing: Acting out chosen problem situations to experience how others feel in given situation.
5. Discuss the possible dangers of using non-prescription medicine.
6. Evaluate the importance of social acceptance as a motivator of drug use in comparison with the harmful effects of the drug used.
7. Discuss the daily requirement of sleep, rest, nutrition, physical activity and recreation that are essential to health.
8. Discuss ways older pupils as individuals and/or as members of groups can exert positive influences on younger pupils to deter them from misusing drugs.

## TWELFTH GRADE SOCIOLOGY

Objectives:

1. The student should understand that emotions and social values play a vital role in their daily activities and problems one may encounter.
2. As students mature they should be aware of the importance of developing proper emotional control.
3. The student should have a clear understanding of the difference between love and infatuation they develop toward the opposite sex.
4. Help the student establish the proper attitude toward courtship and point out how this social activity should be a part of a normal growth pattern.
5. The student should understand the basic dating etiquette and the role of both sexes as dating grows to a more mature stage.
6. The student should know some of the customs used by other cultures during the engagement period. How do these customs differ from those accepted by our society?
7. The laws governing marriage should be reviewed with the students. The following are very important for the welfare of the individuals as well as society.
  - A. Blood Test
  - B. Health
  - C. Age
  - D. Divorce Laws - (reasons for)
8. The student should understand his role as a member of a family unit and be willing to accept those responsibilities.
9. The student should understand the motivation to misuse drugs.
10. The student should understand the world-wide social and economic implications of drug use.
11. The student should understand that a well-balanced individual does not need drugs as an aid to performing daily activities.
12. The student should recognize that drugs, when misused, can cause serious problems.
13. The student should know that individual responsibility is an important factor in effective drug control.



Guidelines for the Teacher:

1. Encourage the student to discuss the role social values play in heterosexual relationships.
2. Encourage students to examine medias role in using the over-emphasis of sex, public personalities, color, and terminology, in attempting to influence behavior.
3. Students should be encouraged to have respect for the opinions, beliefs, and feelings of others.
4. Open discussion on background knowledge would be helpful in determining students' awareness of the drug problem.
5. Emphasize what is termed the "drug problem" problem.
6. Encourage free discussion and relevant factual information rather than authoritative lecture.

Content:

## I. Emotions and Behavior

## A. Understanding our emotions

1. Kinds of emotions
2. Control of emotions
3. Emotional outlets
4. Developing emotional maturity
5. Growing normally toward mature heterosexual associations
  - a. Development of sex drive
  - b. Accepting sex drive as a healthy aspect of total personality
  - c. Recognizing the need to control this drive
  - d. Developing social, intellectual and moral maturity in heterosexual relationships

## B. Courtship

1. Purpose
2. Desirable length of courtship
3. Customs of courtship
4. Deciding whether it's love, infatuation, or sex

## C. Engagement

1. Purpose
2. Customs of the engagement period
3. Behavior patterns of engaged persons
4. Problems engaged couples should discuss
  - a. Financial matters
  - b. Religion
  - c. Mutual responsibilities.
5. Laws governing marriage
6. Counseling

## D. Marriage

1. Typical family unit
2. Monogamous marriage
3. Role of family in society

4. Characteristics of the family
  - a. Family unit in other cultures
5. Purpose and function of the family
  - a. Role of the mother
  - b. Role of the father
  - c. The child's place in the family unit
  - d. Approach to discipline
6. Factors influencing the strength and weaknesses of a family unit

## II. The drug problem - a people problem

- A. For many years man has used various methods of reacting to anxiety and stress
- B. In the present day one method is to inject, inhale, or ingest some chemical substance
  1. To cope with adversity
  2. Escape the tensions and pressures of his highly technical world
- C. Due to man's fast moving environment he has failed to develop a sincere knowledge of self
  1. Applies a substance at first sign of physical or mental stress
  2. Mass media very effective in indoctrinating theories
    - a. All life must be constant pleasure
    - b. All life must be a pleasuring experience
- D. Life with a purpose can be both a pleasurable and rewarding experience without using artificial devices - if one is willing to face up to it.
- E. What causes people to act? (to satisfy needs)
  1. Basic physical needs
  2. Basic psychological needs
- F. Blocking (frustration) of need satisfactions (goal attainment) causes need tensions resulting in
  1. Physical problems
  2. Psychological problems
- G. Dealing with problems
  1. Desirable approaches
  2. Undesirable approaches
- H. Reasons for use and abuse of drugs
  1. Curiosity
  2. Social pressure (peer pressure)
  3. Desire to please
  4. Fear of unpopularity
  5. Escape from school, family, etc.
  6. Boredom
  7. Rebellion against authority
  8. Despair and frustration
  9. To prove they can control drugs
  10. To relax
  11. To fulfill a purposeless life
  12. To shock the "establishment"
- I. Review of drug classifications and their effects
  1. Marijuana
  2. Barbiturates
  3. Amphetamines
  4. Hallucinogens
  5. Opiates

- J. Social effects of drug abuse
1. Waste of human talent and energy
  2. Destruction of personal and family relationships
  3. Anti-social and criminal behavior while under drug influence
  4. Economically feeds the criminal element in society
- K. Alternatives to the Use of drugs
1. Complete avoidance except under the care of a physician
  2. Adopt sound mental health habits
    - a. Develop an attitude toward stress, tension, anxiety and pain as useful signs of hidden problems
      - (1) Define your problem
      - (2) Try to find a positive way to solve it
      - (3) Substitute a worthwhile project
      - (4) Learn to live with situations that can't be changed immediately
    - b. Consult a qualified professional for help with chronic unhappiness

### Vocabulary

Emotion	Monogamous	Social
Sex drive	Culture	Physical
Mixed marriage	Family	Interracial
Society	Etiquette	Premarital
Courtship	Love	Behavior
Engagement	Infatuation	

### Class Activities:

1. Discuss the different kinds of families existing in our culture.
2. Have children of different religious backgrounds share with members of the class descriptions of their various family religious customs.
3. Discuss the role that media plays in influencing the behavior of readers, listeners, and viewers
4. Discuss reasons why adolescents should seek advice from parents, clergy, physicians, guidance counselors and teachers, rather than only from members of their peer groups.
5. Discuss what kind of behavior students expect of their dating partners and what is legally, socially, and religiously accepted
6. Direct the student discussion toward the reasons why people marry, helping them to view sexual expression as part of the total marriage fulfillment.
7. Use people involved in drug problem as guest speaker and resource leaders.

APPENDIX  
SEVENTH GRADE HEALTH

Instructional Materials

Filmstrip:

"Understanding Human Reproduction: A Middle School Approach"

Part I - The film emphasizes the male reproductive system and its function. A series of drawings are used with all parts labeled to show the parts of the male reproductive system.

Part II - Drawings of the female reproductive system and its function. All drawings are labeled. Also an excellent illustration of the menstrual cycle.

Part III - A discussion on how life begins with a review of the male and female reproductive systems. Animated drawings showing the sperm entering the vagina, moving into the uterus and traveling up the fallopian tubes. With the presence of the egg fertilization takes place. The genetic aspect is pointed out as to the determination of sex, and the conditions necessary for multiple birth.

Part IV - Drawings illustrating the changes which take place in embryonic development from conception to birth.

Additional materials will be added as reviewed and evaluated.

Reference Materials

Books:

- "New Ways in Sex Education", Baruch, D., Bantam Books, New York
- "Moving Into Manhood", Bauer, W. W., Doubleday & Co., Inc., New York
- "Attaining Womanhood", Corner, G., Harper & Row, New York
- "What Teenagers Want to Know", Levinshn, F., Lombard, K., Chicago, Budlong Press

Films:

- "Human Body: Reproductive System", Coronet Films, 13 minutes
- "Going Steady", Coronet Films, 11 minutes
- "Understanding Your Emotions", Coronet Films, 13 minutes

## NINTH GRADE SOCIAL STUDIES

Instructional Materials

## Filmslips:

Additional materials will be added as reviewed and evaluated.

Reference Materials

## Books:

- "Sex and the Teenager", Benner, R. & Benner, S., MacFadden, Bartell Corporation
- "Youth, the Years from Ten to Sixteen", Harper & Row, Gesell, A. F., & Ames, L. B.
- "Understanding Sex", Kirkendall, L., Science Research Association, Chicago
- "Juvenile Delinquency", McClellan, G., H. W. Wilson Co., New York
- "Teen-Agers and Sex", Pike, J. A., Prentice Hall, Inc., New Jersey
- "Teachers Handbook on Venereal Disease Education", Schwartz, W. F., National Education Association
- "Dating: Do's and Don'ts", Coronet Films, 15 minutes
- "Understanding Your Emotions", Coronet Films, 13 minutes
- "What to do on a Date", Coronet Films, 11 minutes

NINTH AND TENTH GRADE BIOLOGY

Instructional Materials

Filmstrip:

Human Reproduction 100, 80 slides and teachers guide manual covering the male and female reproductive system; the formation of reproductive cells, conception, and embryonic development.

Additional materials to be added as reviewed and evaluated.

Books:

"Drama of Life Before Birth", Life, April 30, 1965.

"Human Growth and Reproduction", Wilson, C., Bobbs-Merrill Co., Inc.

"Birth Defects", Fishbein, M., Lippincott Co.

Films:

"The Thread of Life", Bell Telephone Co.

"Human Body: Reproductive System", Coronet Films, 13 minutes

"From Generation to Generation", McGraw-Hill, 27 minutes

"Endocrine Glands - How They Affect You", McGraw-Hill, 15 minutes

## TENTH GRADE HEALTH

Instructional Materials

## Filmstrips:

"I Never Looked At It That Way Before"

Part I - Drinking - its problems, leading to sex relations and venereal disease and teenage marriages.

Part II - Smoking and drugs - the effects on one's future life.

"Venereal Disease"

Part I - (mainly gonorrhoea) - origin of syphilis - Columbus' crew returned to Europe carrying the disease from West Indies. How venereal diseases are contracted. Effect of the disease.

Part II - Syphilis. The cause, stages, method of transmission, movement through the body, effect on the body, statistics on the effect of the disease.

Additional materials to be added as reviewed and evaluated.

## Film:

"One Quarter Million Teenagers"

Reference materials related to drug unit to be added.

Reference Materials

## Articles:

"Alcohol is a Depressant - Never a Stimulant", by Dr. George Crane

"Athletics and Tobacco and Alcohol Don't Mix", by Dr. George Crane

"'Sobering Up' Techniques Prove Less Effective Than You Think", by Clara Herron, Teen Topics

"Liquor vs. the Liver", by Dr. Charles Lieber, Newsweek

"Cool Talk About Hot Drugs", by Donald Louria, M. D.

"LSD and Marijuana: An Assessment of Evidence"

"American Observer - Drug Tragedy"

"Trouble in Hippieland", and "Speed Kills", Newsweek

"LSD and the Unborn"

Teachers Resource Guide on Drug Abuse, Pa. Guide

## TWELFTH GRADE SOCIOLOGY

Instructional Materials

## Filmstrips:

"They Lived Happily Ever After: Understanding Teenage Marriages"

Discussion about the real problem of teenage marriages, and comments from those individuals faced with this problem.

Additional materials will be added as reviewed and evaluated.

Reference Materials

## Books:

"Toward Adulthood", Call, A. L., Lippincott Co.

"Love and the Facts of Life", Duvall, E. M., Association Press

"Why Wait Till Marriage", Duvall, E. M., Association Press

"The Sexual Behavior of Young People", Schofield, M., Green and Co.

## Films:

"When Should I Marry", McGraw-Hill, Inc., 19 minutes

"Choosing Your Marriage Partner", Coronet, 13 minutes

"How to Say No, (Moral Maturity)", Coronet, 11 minutes

"Understanding Your Emotions", Coronet, 13 minutes



GENERAL REFERENCE MATERIALS

- "Drugs and You", Oxford Book Co.
- "Drug Abuse: Escape to Nowhere", French Laboratories
- "Stanford Curriculum Guide for Drug Abuse Education", J. G. Ferguson Pub. Co.
- "Teaching About Drugs; A Curriculum Guide", American School Health Association
- "Drug Abuse: The Chemical Cop-out", Blue Cross and Blue Shield
- "Youth and the Drug Problem", Ginn and Co.
- "Teacher's Manual for Drugs and People", Allyn and Bacon, Inc.
- "Resource Book for Drug Abuse Education", National Clearinghouse for Mental Health Information
- "Basic Concepts of Tobacco and Smoking", Laidlaw Publishers
- "Smoking Tobacco and Health", U. S. Dept. of Health Education and Welfare
- "Self-Awareness Through Group Dynamics", Geo. A. Pflaum, Publisher
- "Growing Up Straight", Stein and Day, Publishers
- "Modern Sex Education", Holt, Rinehart and Winston
- "Facts Aren't Enough", American Medical Association
- "Family Life Education", American College of Obstetricians and Gynecologists
- "Invitations to Understanding Through Dialogue", Pediatric Clinics of North America
- "Dimensions of Personality", Geo. A. Pflaum, Publishers
- "Interaction Exercises for Classrooms", National Education Association