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ABSTRACT

This document is the second volume of the Louisiana curriculum guide for teaching a one-semester course in child and adolescent development in grades 10-12. This volume presents basic information regarding the development of children from infancy through school age, including prenatal development. Many lessons of the volume's five major units also include information about how a child in a particular stage of development might relate to parents, siblings, and other significant persons. Lessons in each of the major units begin with generalizations that express the basic idea of the concept. Performance objectives focus on the type of behavior the student is expected to display as a result of the learning experiences. An outline summarizes information that is covered in the review of literature which includes background information for the teacher to use as a beginning point for planning the presentation. References and suggested readings identify sources that the teacher can use in securing additional information. A variety of learning activities, instructional aids, and evaluation experiences are given for each concept. Many of the learning activities and instructional aids include figures for the teachers to use as transparency masters or handouts for students. Evaluation experiences are given with most lessons, and additional learning activities, instructional aids, and evaluation experiences that are pertinent to the entire unit are placed at the end of each unit. The curriculum guide also contains two scope and sequence charts to show how the material in the guide can be presented. (KC)

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STATE OF LOUISIANA
DEPARTMENT OF EDUCATION

Bulletin 1664

CHILD DEVELOPMENT
CURRICULUM GUIDE
VOLUME II

for

Secondary
Vocational Home Economics Programs

Issued by

Office of Vocational Education

N. J. Stafford, Jr.
Assistant Superintendent

J. KELLY NIX
State Superintendent

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NOTICE TO TEACHERS AND ADMINISTRATORS

This curriculum guide includes units that may be considered "sex education," bringing into operation Louisiana Revised Statutes 17:281 (Act 480 of the 1979 Regular Session of the Louisiana Legislature). Since these curricular materials are guidelines and are not mandatory on local educational agencies, each local educational agency should convene the parental review committee as provided for in R. S. 17:281C. This committee should then review the units indicated in the Table of Contents and determine whether or not the units, in whole or in part, are to be taught in the local schools. The committee's recommendation should be forwarded to the local school board for final action.

It should be clearly understood that those units that have been indicated as possibly being within the definition of "sex education" do not have to be included in the course in order for the course to be of appropriate educational quality. A local education agency may include or exclude all or parts of these units without diminishing the quality of the course as a whole.

Guidelines for Instruction of Sex Education in Louisiana, Bulletin 1557, Louisiana State Department of Education, December, 1979, and Act 480 of the 1979 Regular Session of the Louisiana Legislature are included in the Appendix to assist local educational agencies in understanding, interpreting, and complying with Louisiana law regarding instruction in sex education.

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FOREWORD

The Child Development Curriculum Guide, Volume II, is a significant addition to the vocational home economics curriculum in Louisiana.

The project directors utilized many resources in our state and nation in a concerted effort to develop a guide that is practical and sensitive to the needs of teachers and students.

The State Department of Education appreciates the collective effort of Dr. Jeanne M. Gilley, Project Director; Dr. Rick Coleman and Dr. Lynda Clements, Project Assistants; and Dr. Addie Knickerbocker, Teacher Educator Consultant, all of whom worked together in the College of Home Economics at Louisiana Tech University to develop this guide. In addition to these people, many other individuals contributed in significant ways to the development of the guide, and their efforts are also greatly appreciated.


J. KELLY NIX

ACKNOWLEDGEMENTS

This Child Development Curriculum Guide is the result of a three-year project funded by the Office of Vocational Education, State Department of Education. Summer workshops with selected Louisiana high school home economics teachers were conducted in 1979 and 1980. During these workshops teachers worked in cooperation with the College of Home Economics at Louisiana Tech University on two phases of this project: The review of selected literature and the development of learning activities.

Appreciation is expressed to J. Kelly Nix, State Superintendent of Education; Ir. Florent Hardy, Director, Coordinating Unit; Dr. Clarence Ledoux, Section Chief, Evaluation and Curriculum Development; and Dr. Rosalie J. Bivin, Section Chief, Vocational Home Economics, for their support of this project.

Acknowledgements are extended to Dr. Elizabeth G. Haley, former Dean, College of Home Economics, Louisiana Tech University, who supported this project and provided valued encouragement. Special recognition goes to Dr. Jeanne M. Gilley, Project Director; Dr. Rick Coleman and Dr. Lynda Clements, Project Assistants; and Dr. Addie Knickerbocker, Teacher Educator Consultant, all of whom worked as a team in developing this guide. In addition, Mary Bell Tuten and Denise Welcher, College of Home Economics faculty members, served as subject-member consultants.

Appreciation is expressed to Patsy Johnson, Paula Jones, and Dr. Betty Harrison. These high school home economics teachers assisted the project director in the initial planning and development of the project. Their help was invaluable in organizing and planning the workshops that high school teachers participated in during Phase I of the project.

Vocational home economics teachers who participated in workshops and/or served as evaluators of lesson materials were an integral part of the project. These individuals contributed to this guide by utilizing their expertise in classroom teaching and their understanding of the adolescent when developing materials for the guide. Appreciation is expressed to these individuals for their contributions.

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In addition to the home economics teachers, the following high school and college students also participated in the Phase II workshop. These students were very helpful in identifying the needs of high school students.

Tira Bond
Mary A. Culligan
Tina Hefner
Paula Hodgkins
Kathy Jackson
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Northeast Louisiana University, Monroe
Airline High School, Bossier City
Louisiana Tech University, Ruston

Lessons in the guide were also evaluated by specialists in different subject-matter areas. These individuals provided valuable feedback regarding the content of the lessons. Their feedback allowed for the critical assessment of literature in each lesson. The work of the following subject-matter evaluators is greatly appreciated.

University and State Agency Subject-Matter Evaluators-Phases I & II

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Michigan State University
San Jose Community College
Little Rock Public Schools
San Diego State College
Stephen F. Austin University
Florida State University
Southern Association of Children
Under Six

Special appreciation goes to Dr. Joyce Williams for her contributions to the material in the unit on growth of the school-aged child. Her expertise in this phase of child development was extremely valuable in the final writing.

Appreciation is expressed to Sue Husher who worked to organize and coordinate the content reviews. Pat Aswell is also appreciated for her role in developing learning activities for lessons and for editing and rewriting in the final stage of the project. These two home economics

teachers each worked for one year as graduate assistants with the project. They contributed significantly to the overall continuity of the project and provided a valuable perspective of the high school teacher.

N. J. Stafford

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RATIONALE

Home Economics is a people-oriented profession. Courses taught within the home economics curriculum are designed to address the needs of people and to teach people how to function more successfully in their lives and in their relationships with others. Louisiana vocational home economics educators have a long history of being directly involved in developing curricula to meet the needs of students. Under the capable leadership of home economics supervisors, the basic curriculum has been modified, expanded, and strengthened to meet new challenges. One of the greatest challenges to home economics educators is to continue to provide learning experiences that help students to function at a higher level of competence and to more effectively meet the demands of the changing society in which we live.

Educators recognize the importance of teaching material that is personally relevant to the student and that helps the student understand himself/herself and others better. The Child Development Curriculum Guide, Volume II, presents basic information regarding the development of children from infancy through school-age. Many lessons also include information about how a child in a particular stage of development might relate to parents, siblings, and other significant persons. The child is viewed as a part of the family rather than as an isolated individual. As a result, the student learns much about family dynamics and about parenting.

Based on current trends and future projections, both men and women in Louisiana high schools can expect to spend most of their adult life working to support the family and sharing home and parenting responsibilities. Home Economics, as an area of study, has traditionally been interested in preparing individuals to function effectively in their family relationships. Knowledge of child development may reduce many of the anxieties parents often feel in their child-rearing experiences. Recent research suggests that many parents may lack the knowledge and skill to fulfill parenting roles. Without a clear understanding of children and their development, many parents become frustrated and are dissatisfied with their relationships with their children. In some cases parents become physically and/or emotionally abusive toward their children. Child abuse is generally an outcome of a distorted pattern of child rearing. Many abusive parents may not realize that there are alternative ways of dealing with their children. An understanding of child development may potentially serve to prevent child abuse in some cases.

Although one of the goals of this curriculum guide is to prepare individuals to be effective in their personal relationships with children, another goal is to stimulate interest in the professional field of child development. In 1976 over forty-nine percent of all children under age six were enrolled in preschool programs. Many public

schools are beginning to include programs for four-year-olds, and certification for teachers in preschool education is required. There appears to be an expanding job market for individuals who have expertise in child development. In addition, many jobs that are not directly related to child development could be performed more effectively by a person with some background in child development. It seems important, then, to recognize that child development subject matter can be applied in a way that is both personally and professionally relevant.

HOW TO USE THIS CURRICULUM GUIDE

This guide is an effort to help teachers plan and implement courses in child development. It is the intent of this guide to increase understanding of child and adolescent development and family relationships. The guide is appropriate for a non-prerequisite semester course for students in grades ten to twelve. A prime requisite of good teaching is meeting the needs of individual young people. The home economics teacher is challenged to adapt this guide so that the local program will be suitable to the different needs, interests, and socioeconomic backgrounds of the students.

We live in a society that emphasizes freedom of choice, and our educational system has begun to acknowledge the importance of teaching individuals to make decisions. Because high school students today have more options available to them, they also need to be more prepared to make decisions. This curriculum guide covers many topics that either directly teach decision-making skills or address issues that the adolescent will be making decisions about, such as sexual behavior or the use of drugs. These issues are value-oriented and to teach them effectively will require that the teacher recognize the nature of the material and respond to the needs of the students. The goal when teaching about decision-making is not to teach a specific set of values; rather it is to help students recognize the influence that value systems have on human behavior and help students develop their own value framework.

The guide is divided into two volumes. Each volume contains major units which are further divided into lessons. Each lesson begins with generalizations that express the basic ideas of the concept. The performance objectives focus on the type of behavior the student is expected to display as a result of the learning experiences. The outline summarizes the information that is covered in the review of literature.

The review of selected literature includes background information for the teacher's use. Although some of the references are "classics" and therefore are dated, the majority of literature that is included in the review is recent and provides an overview of current literature on the topic. The review of literature is not intended to be a lecture that is presented to students, but the review may serve as a beginning point for planning the teacher's presentation. The references and suggested readings identify sources that the teacher can use in securing additional information.

A variety of learning activities, instructional aids, and evaluation experiences are given for each concept. These experiences were written to be used as tools to bring about the desired learning as stated in the performance objectives. The teacher is not expected to use all the suggestions included in the guide, but to select, adapt, and improvise activities that meet the students' needs. The teacher's selection of

activities will depend on the abilities of the students, the available resources, and the needs of the community. Many of the learning activities and instructional aids include figures for the teachers to use or handouts for students. The figures or handouts are numbered and referenced in the description of the activity or aid. At the end of each lesson the teacher will find the actual figure or student handout. These materials can be easily duplicated for use as transparencies or distributed to each student for the purpose intended. Frequent evaluation is recommended so that the teacher can detect difficulties being encountered by students. For this reason evaluation experiences are given with most lessons, but additional test items should be constructed and added if needed.

Additional learning activities, instructional aids, and evaluation experiences that are pertinent to the entire unit are at the end of each unit. Many of these activities can be used to introduce the unit or can work well at different points in the unit. For this reason, the teacher will want to consider these unit activities in the initial stages of planning.

Two scope and sequence options are identified on the following pages. These charts indicate how the material in the curriculum guide can be presented. The titles used in the Scope and Sequence charts coincide with the titles in the Table of Contents. By referring to the Table of Contents the teacher will be able to locate the unit material represented in the chart. Each option utilizes both Volumes I and II when teaching an 18-week semester course.

Option A entitled "Stages of Child Development" is an outline of how the material can be taught when discussing the stages of development in sequence (infancy through school-aged). Growth and Development of the Adolescent is taught in the first six weeks because it is believed that understanding one's own development may facilitate the understanding of child development (infancy through school-aged). Option B groups all material on different types of development (e.g. physical, mental, social-emotional). The Scope and Sequence chart indicates the lessons in each unit that apply to each type of development. Although the Scope and Sequence charts represent two possible ways of organizing the material, the teacher is encouraged to use the material in the way that best suits the individual program format and the students' needs.

The unit entitled Prenatal Development includes information that may be considered within the definition of "sex education," bringing into operation Louisiana Revised Statutes 17:281 (Act 480 of the 1979 Regular Session of the Louisiana Legislature). Guidelines for Instruction of Sex Education in Louisiana, which includes Act 480, is in the Appendix.

The local educational agency should convene the parental review committee to examine the lessons in this unit and determine whether or not they desire the lessons, in whole or in part, to be taught by the home economics teachers in the local schools. The committee's recommendation should be forwarded to the local school board for final action. A local educational agency may include or exclude all or part of these lessons without diminishing the quality of the course as a whole.

x

SUGGESTED SCOPE AND SEQUENCE CHART (OPTION A)
 STAGES OF CHILD DEVELOPMENT
 CHILD DEVELOPMENT CURRICULUM
 VOLUMES I AND II

SEMESTER COURSE--18 WEEKS

	6-7 Weeks	5-6 Weeks	5 Weeks	1 Week
ix.	Growth and Development of the Adolescent; The Adolescent in the Family	Prenatal Development; Growth and Development of the Infant and Toddler	Growth and Development of the Preschool Child and the School-Aged Child	Careers in Child Development

SUGGESTED SCOPE AND SEQUENCE CHART (OPTION B)

DEVELOPMENTAL APPROACH

CHILD DEVELOPMENT CURRICULUM

VOLUMES I AND II

SEMESTER COURSE--18 WEEKS

5 Weeks

PHYSICAL GROWTH AND DEVELOPMENT

Prenatal Development: Conception; Physical Development of the Embryo/Fetus; Environmental Influences on Prenatal Development; Infant and Toddler: Physical Growth and Development; Nutrition; Methods of Feeding the Infant; Physical Needs: Rest and Sleep; Health Care; Preschool Child: Physical Growth and Development; Nutrition and Health Care; School-Aged Child: The Physical Self: Body Changes and Abilities; Food and Health; Illness and Injury; Adolescent: Physical Growth and Development (4-lesson unit)

4 Weeks

MENTAL GROWTH AND DEVELOPMENT

Infant and Toddler: Motor Development; How Infants and Toddlers Learn; Language Development; Role of Play in Learning; Preschool: Intellectual Development; Language Development; School-Aged: Moral Decision-Making; Educational Experiences; Adolescent: Mental Growth and Development (5-lesson unit)

5 Weeks

SOCIAL-EMOTIONAL GROWTH AND DEVELOPMENT

Infant and Toddler: Social Growth and Development; Emotional and Personality Growth and Development; Preschool: Guidance; Emotional Development; Self-Concept Development; Social Development; Selecting Toys for the Preschool Child; Play; Creative Materials for Young Children; Influence of Television; School-Aged: The Society of Childhood; Family and Peer Influences; Mass Media; Personality: Self-Concept and Independence; Emotions; Sex and Social Role; Adolescent: Social-Emotional Growth and Development (4-lesson unit)

2 Weeks

FAMILY RELATIONSHIPS

Adolescent: The Adolescent in Health and Crisis (4-lesson unit)
The Adolescent in the Family (6-lesson unit)

2 Weeks

CARING FOR CHILDREN

Infant and Toddler: Child-Care Facilities; Observation Techniques; Preschool: Baby-Sitting; Observation Experiences; Child Development Careers (3-lesson unit)

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*Lessons in this unit include information that may be considered within the definition of "sex education," bringing into operation Louisiana Revised Statutes 17:281 (Act 480 of the 1979 Regular Session of the Louisiana Legislature).

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UNIT: Prenatal Development

CONCEPT: Conception

GENERALIZATIONS

1. Ovulation is the process by which an egg erupts from the surface of one of the ovaries and moves down one of the two Fallopian tubes toward the uterus.
2. Fertilization occurs when one sperm cell penetrates the cell wall and fertilizes the egg.
3. The mass of cells that results from the division of the newly fertilized egg is called a "zygote."
4. Fraternal twins occur when the ovaries release two egg cells, and each egg cell is fertilized by a separate sperm cell.
5. Identical twins occur when one egg cell is fertilized by one sperm cell and then splits into two separate cells.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define "ovulation," "ovary," "Fallopian tube," "fertilization," "chromosomes," and "zygote," as related to conception.
2. Discuss the causes of fraternal and identical twins.
3. Explain how a baby inherits traits from parents.

OUTLINE

- I. Ovulation
- II. Fertilization
- III. Development
 - A. Heredity
 - B. Twins
 1. Fraternal
 2. Identical

REVIEW OF SELECTED LITERATURE

Conception or fertilization is the process by which a single sperm cell from the male unites with an egg cell from the female to form a single cell capable of growing into a new individual. In the female, the stage for this process is set once each month when an egg cell is released from one of her ovaries, a process called "ovulation." When it is released, the egg cell moves into the Fallopian tube. The Fallopian tube is the slender tube, leading from the ovary to the uterus, or womb, through which the egg passes (Nilsson, 1975).

If the egg is met by a sperm cell from the male, then fertilization occurs. This union happens in the Fallopian tube. Millions of sperm cells from the male meet the egg cell, yet only one actually penetrates the cell wall and fertilizes the egg. As soon as one sperm penetrates the egg, the cell wall immediately becomes impermeable to the penetration of any other sperm cell.

The fertilized egg begins moving down the Fallopian tube, and as it does, it begins to divide and subdivide. When it arrives in the uterus, it is a small ball of cells, resembling a blackberry in appearance. This mass of cells is known as a "zygote" (rhymes with "Hi goat").

In the nucleus of every cell of each human being, there are forty-six small rod-shaped bodies known as "chromosomes." Each chromosome is composed of thousands (up to 20,000 or more) of genes. These genes determine what the individual will look like and influence many other physical, mental, and emotional traits. In the nucleus of each egg cell and each sperm cell, there are only twenty-three chromosomes. When the two join at the moment of fertilization, the normal human number of forty-six is once again established (remember nature's math must add up), and the new baby that will grow from that egg and sperm has received half of its chromosomes (and genes) from its mother and half from its father. The child therefore will have many traits (such as eye color, hair color, shape of nose, ears, etc.) just like one or both parents (Ambron, 1981; Papalia & Olds, 1979).

It is at the time of fertilization that twins are determined. Sometimes the ovaries will release not one, but two egg cells. When this occurs, each egg will be fertilized by a separate sperm cell and the result will be "fraternal" twins. Identical twins, on the other hand, occur when one egg cell is fertilized by one sperm cell. At the point when the cell first divides into two cells, for some reason, not known at present, the two cells become separated. Each cell then goes on to develop as a separate cell forming a complete embryo. The result is two individuals who share the same genetic makeup and are therefore identical twins.

REFERENCES

Ambron, S. Child development (3rd Ed.). New York: Holt, 1981.

Nilsson, L. A child is born: The drama of life before birth.
New York: Dell Publishing, 1965.

Papalia, D., & Olds, S. A child's world: Infancy through adolescence.
New York: McGraw-Hill, 1979.

SUGGESTED READINGS

Dobzhansky, T. Genetic diversity and human equality. New York:
Basic Books, 1973.

An excellent background text on genetics and conception.

Moore, K. L. The developing human. Philadelphia: W. B. Saunders, 1977.

An interesting and comprehensive text on human development.

LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Invite a nurse or obstetrician to discuss conception. Compile a list of questions that can be given to the speaker ahead of time. Allow time for questions and answers after the presentation.

Materials Needed: Letter confirming time and date, thank you letter

2. Title: Crossword Puzzle

Description: Complete the crossword puzzle entitled "Conception" (Student Handout #1).

Key: Across

2. Zygote
4. Conception
7. Fraternal
8. Fallopian

Down

1. One
3. Gene
5. Twins
6. Ovulation

Materials Needed: Copies of puzzle

3. Title: Report

Description: Select one student to report to the class on how the sex of a child is determined.

Materials Needed: Reference books

4. VOCABULARY

1. Conception--The process in which a single sperm cell unites with an egg cell to form a single cell capable of growing into a new individual.
2. Fallopian tube--The tube leading from the ovary to the uterus.
3. Zygote--Small mass of cells formed when the fertilized egg cell divides and subdivides.
4. Chromosomes--The rod-shaped bodies in human cells which contain the genes.
5. Genes--The complex chemical units found in the chromosomes that are the actual carriers of heredity.

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Use "Sex Determination" (Figure #1) and "Twins" (Figure #2) as transparencies when discussing sex determination and twins.

Materials Needed: Transparency materials, overhead projector

2. Title: Sources

Description: Science teachers may have materials on genetics and heredity that they would be willing to share. The materials listed below might be helpful.

Sources: Newton, D. Visual masters on genetics and heredity. Portland, Maine: Western Walch, 1974 Visual Numbers 4-8.
Stein, S. B. Making babies. New York: Walker & Co., 1974.

EVALUATION

1. Title: True/False Statements

Description: The true/false statements listed below could be used in constructing a pretest or post-test. Write "true" if the statement is true and "false" if the statement is false.

False 1. Ovulation is the process in which a single sperm cell unites with an egg cell to form a single cell capable of growing into a new individual.

False 2. The sperm cell meets in the egg cell in the ovaries.

True 3. Only one sperm cell actually penetrates the egg cell wall.

False 4. The chromosome is a small mass of cells.

True 5. Genes determine the physical, mental, and emotional traits that are inherited from parents.

True 6. There are forty-six chromosomes in every cell of each human being, except the egg cell and the sperm cell.

True 7. Fraternal twins are no more alike than any other brother and sister.

False 8. Identical twins occur when the ovaries release two egg cells.

False 9. Fraternal twins have to be two boys, or two girls; they cannot be a boy and a girl.

True 10. The Fallopian tube carries the egg cell from the ovaries to the uterus.

Materials Needed: Copies of test

2. Title: Writing Assignment

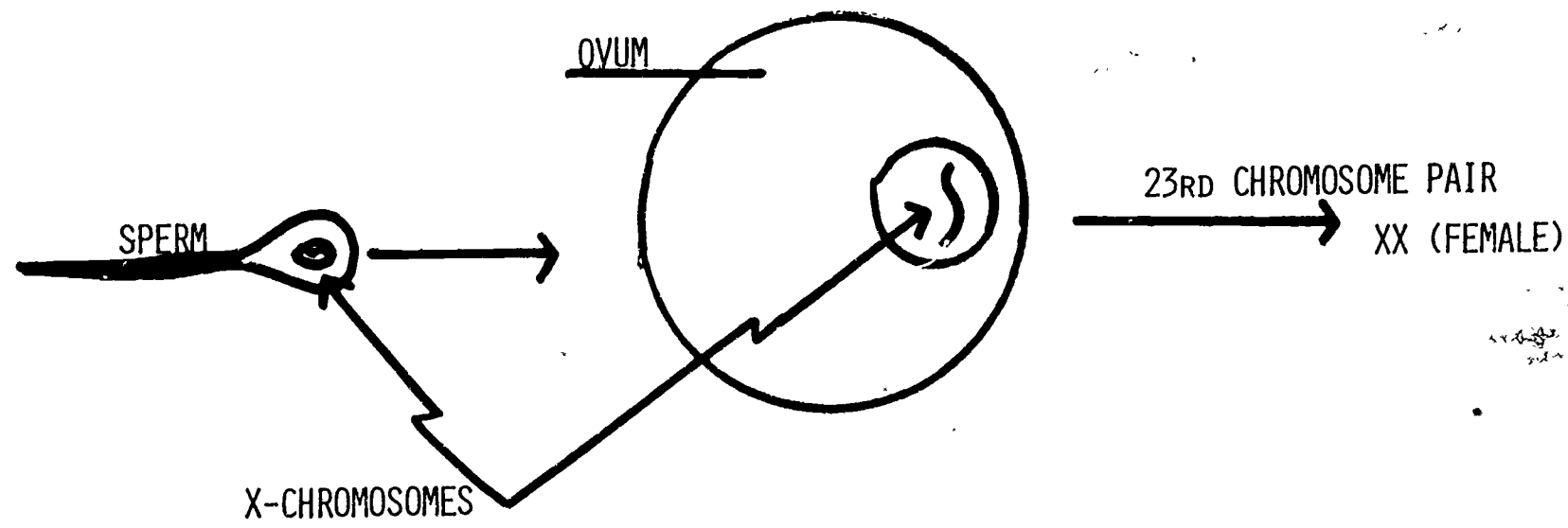
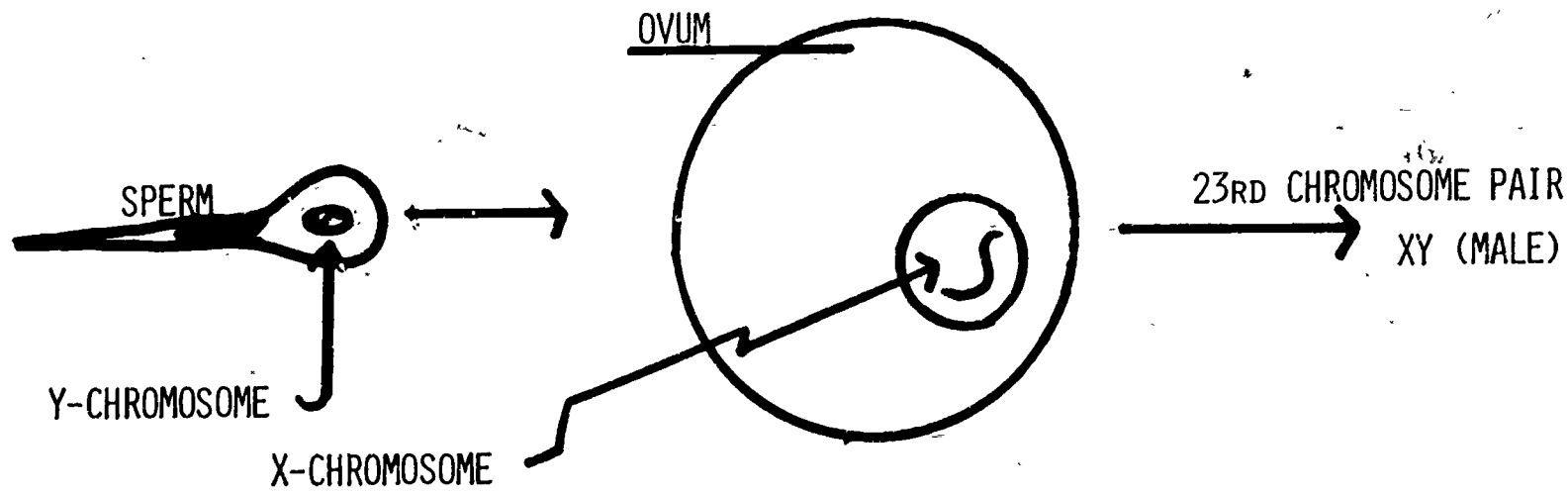
Description: React in writing to one of these questions:

1. Explain the causes of fraternal and identical twins.
2. Explain how a baby inherits traits from parents.

Materials Needed: Paper, pen

Figure #1

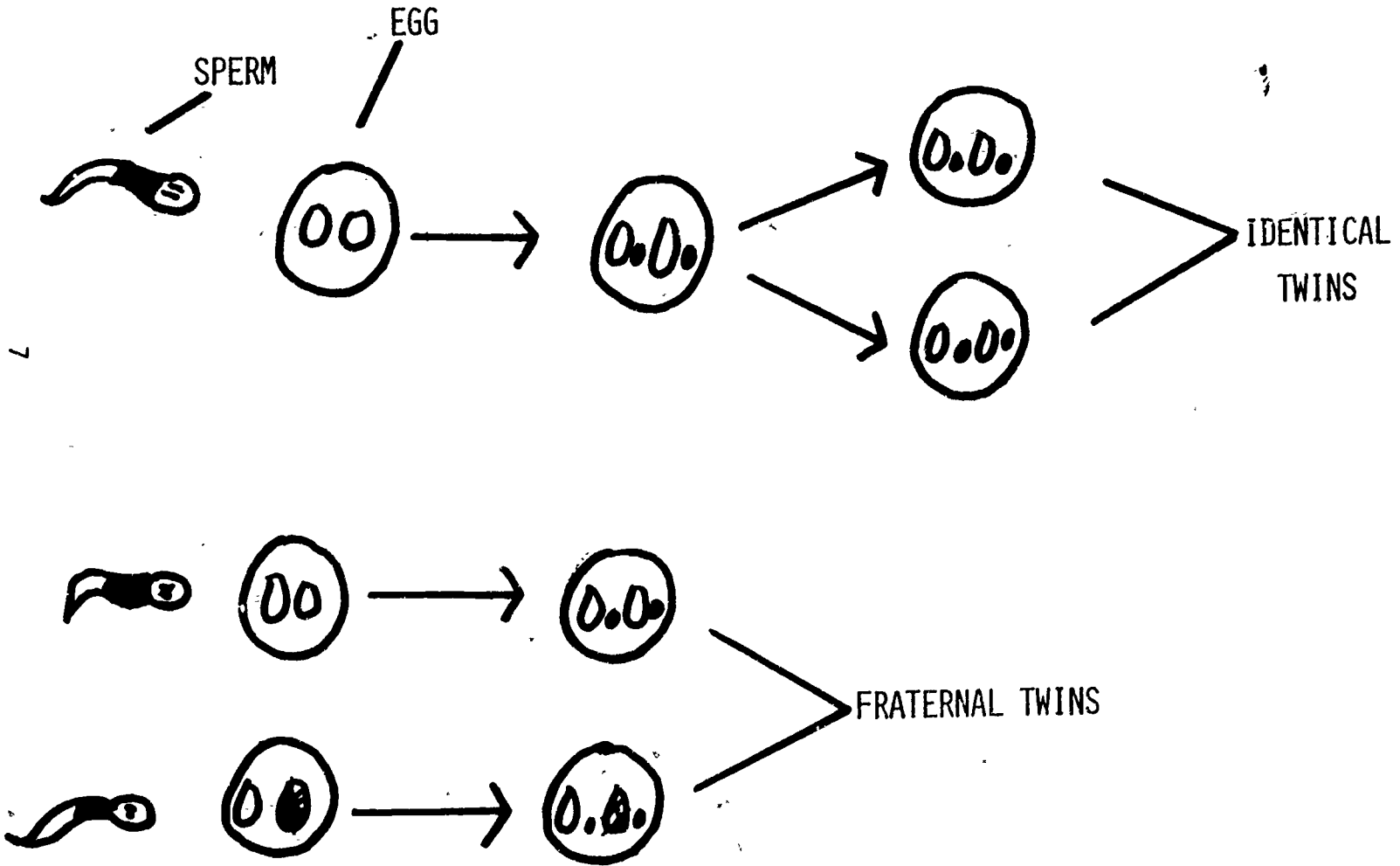
SEX DETERMINATION



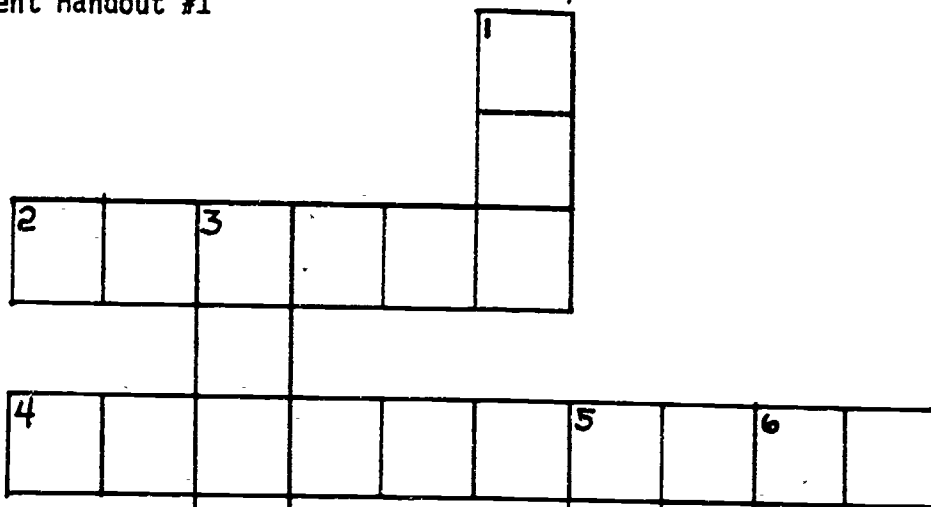
9

Figure #2

TWINS



Conception - Crossword Puzzle
Student Handout #1



Across

2. The small mass of cells formed when the fertilized egg divides and subdivides.

4. The process in which a single sperm cell unites with an egg cell to form a single cell capable of growing into a new individual.

7. Type of twins which occur when the ovaries release two egg cells and both are fertilized.

8. _____ tubes connect the ovaries with the uterus.

Down

1. Number of sperm cells which will actually penetrate the egg cell.
3. A complex chemical unit found in chromosomes that is the actual carrier of heredity.
5. Identical _____ share the same genetic make up.
6. The monthly process in which an egg cell is released from the ovaries.

UNIT: Prenatal Development

CONCEPT: Physical Development of the Embryo/Fetus

GENERALIZATIONS

1. Physical development of the embryo/fetus is divided into three stages.
2. Each stage of prenatal development is characterized by the development of specific physical traits and structures.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Demonstrate a knowledge of the sequence of the stages of prenatal development by listing the correct names of the three stages with the times and developmental event separating the three stages.
2. Classify each developmental event in a list as to its appropriate stage of prenatal development.

OUTLINE

- I. Three Stages of Prenatal Development
 - A. Period of the Ovum (Germinal Period)
 1. Cell division of the ovum
 2. Cell differentiation
 3. Implantation
 - B. Period of the Embryo
 1. Development of the body structures
 2. Development of the body systems
 - C. Period of the Fetus
- II. Preparation for Birth

REVIEW OF SELECTED LITERATURE

Development of the baby through the nine calendar months of prenatal development takes place in three easily defined stages. These three stages are based on the actual physical stage of development of the embryo. The three stages of prenatal development are known as

(1) The Period of the Ovum (or Germinal Period), (2) The Period of the Embryo, and (3) The Period of the Fetus. (These three stages of prenatal development should not be confused with the familiar "three trimesters," which relate to other aspects of pregnancy.)

The Period of the Ovum is usually thought of as the first two weeks of prenatal development. It actually covers the time from the moment of fertilization, when the sperm cell unites with the egg cell, until the zygote (the ball of cells resulting from the early division of the fertilized egg cell) is implanted in the lining of the uterus (womb).

The cells of the zygote continue to divide and subdivide throughout the stage of the ovum. Toward the end of the stage, a process called "cell differentiation" begins to occur. The cells of the zygote, which up to this time were all identical, begin to change. Some cells begin to form the skin of the embryo; other cells begin to form the nervous system; still others begin to form muscles and digestive organs. All this process is controlled by the genetic code written into the DNA in the chromosome of each cell (Papalia & Olds, 1979).

Toward the end of the Period of the Ovum, the zygote comes to rest on the lining of the uterus, usually in the roof. The zygote then begins to burrow into the lining until it is completely covered. Here the zygote will remain for the remainder of prenatal development. This implantation marks the end of the Period of the Ovum and usually occurs at about the end of the second week after fertilization.

The Period of the Embryo begins with implantation and lasts until approximately the end of the second month. During this time, development is very rapid. All of the different body systems are formed in this period. By the end of this period, the embryo, as it is now called, will look just like a miniature human being.

By four weeks, the heart will have begun beating. As it pumps blood through the umbilical cord and placenta, the embryo gets food and oxygen from its mother and has waste taken away. There is never any mixing of the embryonic and maternal blood supply. Food, oxygen and waste materials are passed across a thin membrane which separates the two blood supplies.

By five weeks, the arm and leg buds are beginning to form. The arms and legs will be fully formed by the end of the Period of the Embryo. During this period, the development of the brain is very rapid. This rapid development causes the head of the embryo to appear much larger than the rest of the body (Smart & Smart, 1977).

Throughout the Period of the Embryo, the skeletal system has been developing. This early skeleton is composed entirely of cartilage, a bone-like material like that in the end of the nose. At about eight weeks, or the end of the second month, this cartilage begins to change into true bone tissue starting at the midpoints of the large bones of

the arms and legs. This developmental event is the actual dividing line between the Period of the Embryo and the last stage of prenatal development known as the Period of the Fetus (Nilsson, 1965).

The word "fetus" is a Latin term meaning "young one." As the Period of the Fetus begins, the fetus appears as a fully formed, miniature baby. The remainder of the prenatal development will be devoted to maturing and growing in size in preparation for birth. As the fetus grows, it becomes stronger. As nerves and muscles become coordinated, the baby will begin to kick, which can be felt by the mother.

The fetus continues to grow until it reaches a weight of about seven or eight pounds and a length of about twenty inches. At about nine calendar months, the baby is ready to be born. When the fetus has reached its full prenatal development, complicated factors, not fully understood, cause the mother's uterus to contract and labor begins. The complicated process of prenatal development is nearly at an end. The baby has, in the space of nine short months, grown from a microscopic one-celled organism to a seven or eight pound baby capable of surviving apart from mother.

REFERENCES

- Nilsson, L. A child is born: The drama of life before birth. New York: Dell Publishing, 1965.
- Papalia, D. E., & Olds, S. W. A child's world: Infancy through adolescence. New York: McGraw-Hill, 1979.
- Smart, M. S., & Smart, R. C. Children: Development and relationships (3rd ed.). New York: Macmillan, 1977.

LEARNING ACTIVITIES

1. Title: Research Assignment

Description: Divide into groups and using various reference books, determine the size of an average embryo/fetus at the following ages. Also find out what organs are developed at these times: (1) First week, (2) Eight weeks, (3) Twelve weeks, (4) Sixteen weeks, (5) Twenty weeks, (6) Seven months, (7) Nine months. Come back and discuss, as a class.

Materials Needed: Various reference books

2. Title: Chart

Description: Using the information from Activity 1, make a chart which illustrates prenatal development.

Materials Needed: Poster paper, markers

3. Title: Guest Speaker

Description: Invite a technician or nurse to speak on ultrasonography and amniocentesis. See if some actual ultrasound pictures can be brought and explained to the class.

Materials Needed: Letter confirming time and date, thank you letter

4. VOCABULARY

1. Cell differentiation--When the cells of the zygote begin to form different kinds of tissues and systems.
2. Umbilical Cord--The tube-like structure that joins the unborn baby to the placenta.
3. Cartilage--Soft bone-like material like that in the end of the nose.
4. Placenta--The organ that joins the mother to the unborn baby and through which food and oxygen pass.

INSTRUCTIONAL AIDS

1. Title: Filmstrip

Description: "More Than Love" is about the growth of human life during its first forty days. The effects of good prenatal care from the moment of conception are emphasized.

Materials Needed: Filmstrip projector, tape player, filmstrip

Source: "More Than Love"--National Foundation/March of Dimes, Box 2000, White Plains, N. Y. 10602. Cost--\$10.00.

2. Title: Poster

Description: Proctor and Gamble has a set of posters related to pregnancy and infant growth. One of these is Baby's Prenatal Growth which has actual-sized illustrations of various stages of prenatal development.

Materials Needed: Poster

Source: Poster-Chart Pack #241-8643 available from The Proctor and Gamble Company, Cincinnati, Ohio 45201. One set free per teacher.

EVALUATION

1. Title: Pretest

Description: The true-false statements listed below can be used as a basis for a pretest to evaluate students' knowledge at the beginning of the lesson. Write "true" if the statement is true and "false" if the statement is false.

True 1. The normal length of time needed for prenatal development is nine months.

True 2. In prenatal development the embryo stage comes before the fetus stage.

False 3. The zygote usually implants itself on the floor of the uterus.

True 4. The zygote will burrow into the lining of the uterus until it is completely covered.

False 5. The heart will start beating sometime during the sixth month.

False 6. The mother's blood carries food and oxygen to the fetus; her blood mixes with the blood of the fetus, and then the mother's blood carries away waste.

True 7. The rapid development of the brain causes the head of the embryo to appear much larger than the rest of the body.

True 8. The early skeleton is composed entirely of cartilage.

False 9. About two months after fertilization, the mother will feel the baby kick.

True 10. The average baby at birth is about twenty inches long.

Materials Needed: Copies of pretest

2. Title: Chalkboard Evaluation

Description: Divide the chalkboard into three sections with these titles--"Period of the Ovum," "Period of the Embryo," and "Period of the Fetus." Give the following list to students; ask them to decide in which category each characteristic belongs. Then ask various students to come to the board and write the characteristics in the correct category.

Characteristics:

1. Usually lasts from about third week to the end of the second month (*embryo*)

2. Still a zygote (*ovum*)
3. Cartilage begins to turn into true bone structure (*embryo*)
4. Fully formed miniature baby (*fetus*)
5. Zygote begins to burrow into the lining of the uterus (*ovum*)
6. Mother will begin to feel baby kick (*fetus*)
7. Cell differentiation (*ovum*).
8. Heart starts beating (*embryo*)
9. A time of just growing and getting stronger (*fetus*)
10. Arm and leg buds begin to form (*embryo*)

Materials Needed: List of characteristics, chalkboard

UNIT: Prenatal Development

CONCEPT: Physical Changes During Pregnancy

GENERALIZATIONS

1. Pregnancy is a normal state that necessitates physiological adjustments.
2. Understanding physiological changes of pregnancy will aid in identifying causes of minor complications and recognizing symptoms requiring medical attention.
3. Using correct terminology associated with prenatal care increases one's understanding of the process and makes communication easier.
4. Medical supervision is important for the health of the mother and unborn child.
5. Excessive physiological stress is placed on the body if the mother-to-be has not reached physical maturity or is beyond normal child-bearing age.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define terms related to physical changes during pregnancy.
2. List and discuss the physical changes that occur in the body during pregnancy.
3. Identify symptoms that indicate pregnancy complications.
4. Explain required prenatal care for lessening chances of complications in pregnancy.

OUTLINE

- I. Changes in Body Systems
 - A. Reproductive
 - B. Digestive
 - C. Circulatory
 - D. Respiratory

- E. Urinary and Bowel
 - F. Breast
 - G. Skin
- II. Weight Gain During Pregnancy
- III. Identifying Pregnancy Complications
- A. Danger Signals
 - B. Avoiding Complications

REVIEW OF SELECTED LITERATURE

Significant physical changes take place during pregnancy, and many of these occur during the weeks before the female is aware that she is pregnant. Every system of the body is affected. These physiological changes are normal and temporary and influence emotional, mental, and physical health.

If menstrual periods have been fairly regular, the cessation of menstruation will be one of the first noticeable signs of pregnancy. During pregnancy, high levels of estrogen and progesterone prevent the sloughing off of the endometrium (lining of the uterus). At approximately two weeks after the cessation of the menstrual period, pregnancy may be confirmed by a positive reaction to a biological pregnancy test (Nilsson, 1965).

Enlargement of the uterus is the most striking change resulting from pregnancy. As the uterus increases in size, the weight increases from about two ounces to over two pounds, and the change in capacity is from a half teaspoon to four or five quarts (Smart & Smart, 1977). The lower rounded end of the uterus, known as the "cervix," softens as the cervical canal fills with mucus. The presence and acidity of mucus acts as protection from bacterial invasion. One of the first symptoms of true labor is a release of the mucus in the form of a discharge commonly called "show" (Bookmiller, Bowen, & Carpenter, 1967).

The pregnant female may notice a feeling of heaviness in the lower abdomen caused by the increased circulation of blood. The entrance to the vagina and the neck of the uterus will show a blue discoloration as early as three weeks after the missed period. The vaginal lining will become softer with increased mucus production and discharge. This discharge is normal, but if an itching or a burning sensation occurs, a physician should be consulted.

The basal metabolism (the minimum amount of energy needed by the body for the life processes) is low in the first trimester and rises in the last three months of pregnancy. This change in metabolism results in the common feelings of fatigue particularly noticeable during the first three months.

There is an increase in hormones secreted by the endocrine glands. Early in pregnancy, the placenta, the means by which the fetus gets its food, begins to secrete the hormones estrogen and progesterone, which were previously produced in small amounts by the ovaries. Other glands affected include the thyroid, parathyroid, pituitary, and suprarenals. Even sweat and sebaceous glands will become more active during pregnancy.

Digestive organ functions may be altered somewhat by pregnancy. Appetite will diminish if persistent nausea exists. A good well-balanced diet is necessary to meet the needs of the mother and fetus, but large quantities of food are not needed. After the first trimester, the appetite may increase, and it becomes important for the expectant mother to select foods carefully to prevent excessive weight gain.

Nausea appears in many pregnancies. Some women may remain nauseated the entire nine months. Frequently, eating dried fruits and dried crackers or bread in small amounts and keeping the stomach slightly coated with food helps to control nausea. If nausea is severe, the doctor can prescribe medication to provide relief.

Heartburn, or burning pain in the area just below the ribs, is common in the middle and later months of pregnancy. Heartburn results when the increased size of the uterus forces the stomach out of its normal position and with the change in acidity of the gastric juices in the stomach (Nilsson, 1965). Pressure on the diaphragm and changes in the digestive system often delay the emptying time of the stomach.

During pregnancy the amount of blood that flows through the body will also increase. Scientists estimate that by the end of the seventh month, a pregnant woman has about thirty percent more blood than before pregnancy. The production of red blood cells does not keep pace with the fluid content which sometimes gives the impression that the pregnant woman is anemic. Iron supplements are often prescribed by the physician to maintain the proper iron level in the blood (Hutchins, 1979). Because there is more blood in the body, the heart has to work harder to pump the blood. Heartbeat and pulse rate become somewhat faster in order to do the job. In women with normal hearts, this increase is of no particular concern. Changes also take place in the blood pressure, but an abnormal rise should be carefully monitored by the woman's physician (Bookmiller et al., 1967).

During pregnancy, veins are more capable of expanding because they have to carry more blood; this expansion, coupled with the results of pressure on the circulatory system owing to the increase in the size of the uterus, contributes to the problem of varicose veins and hemorrhoids. The simplest way to prevent varicose veins is to avoid the use of constricting garments about the legs and to elevate the legs when resting. Hemorrhoids are large veins around the opening of the rectum, caused by the increased pressure of the enlarging abdomen and uterus. The doctor should be consulted if hemorrhoids are noticed or if the bowel is blood-tinged and the movement painful.

Pressure from the underlying uterus and diaphragm may cause the lungs to be displaced upward as much as one inch during the later months of pregnancy. As a consequence, women experience shortness of breath. Although it would seem that less air is taken in, this is not the case. Actually to oxygenate not only her own blood, but also that needed for the fetus, the pregnant woman must breathe in much more air than the non-pregnant woman (Bookmiller et al., 1967).

There are changes in both the structure of the urinary system and in the frequency with which it empties. An almost constant feeling of bladder fullness is common during the first and last trimester of pregnancy. There is also an increase in the total amount of water stored in the body. Although there are no marked changes in the kidneys during normal pregnancy, they must perform an increased amount of work to take care of the products of increased metabolism and the waste of the developing fetus. Urine increases in amount and is of lower specific gravity.

An increased incidence of constipation is another normal body change. A bilious feeling may result from increased strain on the liver, and a light diet without fats or hard-to-digest food and liberal consumption of fruit juices can help.

Changes in the breast will often be noticed even before pregnancy is confirmed. Characteristic breast changes are an increase in the size of the pigmented area around the nipple (areola) and the presence of enlarged glands in the area immediately surrounding the nipple. As early as the fourth month of pregnancy, some women may notice colostrum (a clear yellow, high-protein fluid, forerunner of breast milk) being secreted (Bookmiller et al., 1967). If colostrum secretion occurs, the nipple should be kept washed to prevent the liquid from forming a crust and causing soreness.

General irritations associated with dryness of the skin are not uncommon. During the last months of pregnancy, streaks may appear on the skin of the abdomen or breast. These are caused by stretching of the skin and will fade into thin pale lines after pregnancy. Brown discolorations that sometimes appear on the face will usually disappear after delivery.

The desirable weight gain for women during pregnancy is about twenty percent of pre-pregnancy weight. The following is a breakdown of what constitutes the total weight gain during pregnancy (Bookmiller et al., 1967):

7-7.5 pounds fetus

1-1.5 pounds placenta

2 pounds amniotic fluid

2-3 pounds expanded blood volume

1 pound in increased breast size

2 pounds enlarged uterus

5-8 pounds increase in fat and water in the body tissue

When and how fast the pregnant woman gains weight is more important than the total amount of weight gained. In the first three months, a gain of only two to four pounds is recommended. During the next six months, an average gain of slightly less than one pound per week is about normal.

Although pregnancy is a normal state, occasional problems arise. Although many of these problems are minor complaints, others are severe and need medical attention immediately.

The danger signals which should be reported to the doctor at once are bleeding from the vagina; swelling or puffiness of face and hands; sudden excessive weight gain; vaginal discharge that burns, stings, or itches; severe continuous headache; dimness, blurred vision, or spots before the eyes; reduced amount of urine; pain or burning during urination; chills and fever; severe abdominal pains or cramps; severe or continuous vomiting; and a sudden gush of water-like fluid from the vagina.

The physical effects of pregnancy on the body and pregnancy complications can be minimized by considering the following:

1. Avoid becoming pregnant before age twenty or until the body has completed physical maturity. Complications of pregnancy are more likely to result in death for younger mothers than for more mature mothers. The instance of mortality in children of teen-aged mothers is nearly twice that of children born to women in their twenties.
2. Space births at least two years apart.
3. Have no more than four children.
4. Avoid pregnancy after thirty-five. Maternal death rate doubles between the early thirties and the late thirties and increases nearly eight fold by age forty-five. The rate of genetic defects also rises, particularly those causing mongolism (Ambron, 1981).

A knowledge of childbearing will enable the woman to understand changes occurring in her body and reasons for minor discomforts. Symptoms of conditions that could be dangerous both for the mother and fetus can be recognized. Most physiological changes need not be of concern to the healthy woman as she enjoys her pregnancy and the anticipation of the birth of the child.

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- Bookmiller, M. M., Bowen, G. L., & Carpenter, D. Textbook of obstetrics and obstetric nursing. Philadelphia: Saunders, 1967.
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LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Invite a nurse, doctor, or knowledgeable resource person to address the class on the normal changes that occur in a woman when she is pregnant.

Materials Needed: Letter confirming the date and time, thank you letter

2. Title: Game

Description: Complete the dial-the-answer game entitled "Physical Changes in the Mother" (Student Handout #2).

Key:

1. Changes	6. Crackers
2. Menstruation	7. Heartburn
3. Metabolism	8. Blood
4. Estrogen	9. Iron
5. Nausea	10. Danger

Materials Needed: Copies of game

Reference: Adapted from Brisbane, H. The developing child-student guide. Peoria, Illinois: Charles A. Bennett, 1980.

3. Title: Interviews

Description: Individually interview as many mothers as possible. Find out how much weight gain they had during their pregnancies, how much their baby weighed, and if there were any problems related to weight. As a class, chart the results and determine the following:

1. What was the average weight gain of the mothers?

2. Does there appear to be any relationship between mother's weight gain and the baby's birth weight?
 3. What kinds of problems were reported?
4. VOCABULARY
1. Estrogen and Progesterone--Female hormones.
 2. Basal Metabolism--The amount of energy needed solely for cellular activity, respiration, and circulation while the body is at rest.

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Use the master on "Weight Gain Expectations" (Figure #3) to make a transparency that can be used in the discussion on weight gain.

Materials Needed: Transparency materials, overhead projector

2. Title: Bulletin Board

Description: Construct a bulletin board with a clothes line. Use the caption "Physical Changes During Pregnancy" or "Danger Signals of Pregnancy." On slips of paper write appropriate symptoms and attach to clothes line with clothes pins.

Materials Needed: Background, letters, yarn, clothes pins, slips of paper, markers, clothes line

EVALUATION

1. Title: Review Questions

Description: The following questions can be used as a review.

1. How soon after cessation of the menstrual period can a gynecologist confirm pregnancy?

Two weeks.

2. What causes the expectant mother to feel the heaviness in the lower abdomen?

Increased circulation of blood.

3. Describe the mouth of the uterus.

The uterus becomes soft and turns a bluish red color.

4. At what time during a pregnancy does lactation occur?

As early as the fourth month.

5. When does colostrum begin to secrete?

As early as the fourth month.

6. Discuss basal metabolism during the first trimester and the last three months of pregnancy.

Basal metabolism is low in the first trimester and rises in the last three months of pregnancy.

7. What is the most striking change during pregnancy?

Enlargement of the uterus is the most striking change during pregnancy.

8. How early during a pregnancy might "false labor" occur?

As early as the tenth week of pregnancy.

9. What causes heartburn?

Heartburn results when the uterus forces the stomach out of its normal position and gastric juices are pushed up into the esophagus.

10. What happens to the heart of the expectant mother while she is carrying her baby?

The heart gets larger, as a result of the growing uterus, and is pushed somewhat upward, forward, and to the left, sometimes causing the doctor to hear a murmur.

Materials Needed: Copies of questions

2. Title: Fill-in-Blank Quiz

Description: Complete fill-in-blank sheet on minimizing complications after discussing this topic.

Fill in the blank from the words listed below.

twenty
five
two
doubles
three years

forty-five
twenties
teen-aged
six
four

thirty-five
eight
twice
two years
twenty-four

1. Avoid becoming pregnant before the age of twenty.

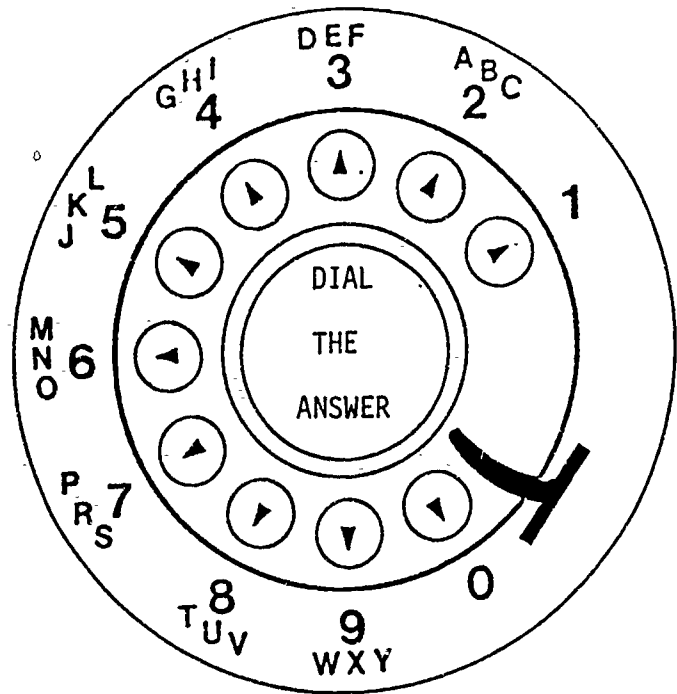
2. The instance of infant mortality in children of teen-aged mothers is nearly twice that of children born to women in their twenties.
3. Space births at least two years apart.
4. Have no more than four children.
5. Try not to gain more than twenty-four pounds during the pregnancy.
6. Avoid pregnancy after the age of thirty-five.
7. Maternal death rate doubles between the early thirties and the late thirties and increases nearly eight times by age of forty-five.

Materials Needed: Copies of quiz

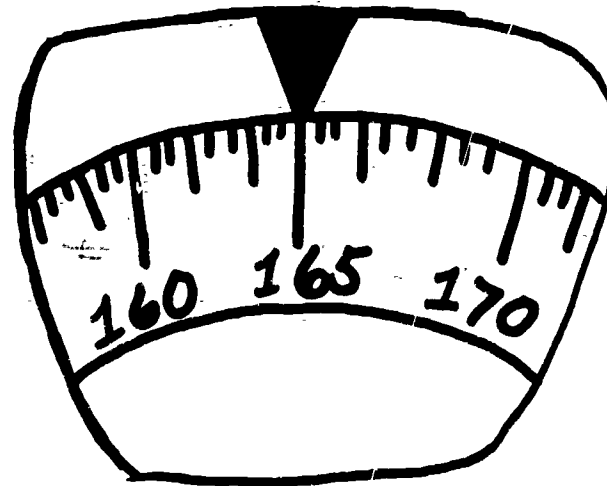
Physical Changes in the Mother
Student Handout #2

Fill in the statements with
correct terms.

Use the telephone dial to
help or to check answers.



1. There are normal physiological _____
that occur when a female is pregnant. 2 4 2 6 4 3 7
2. The stopping of _____ is usually one
of the first noticeable signs of pregnancy. 6 3 6 7 8 7 8 2 8 4 6 6
3. Changes in basal _____ often result in
feelings of fatigue. 6 3 8 2 2 6 5 4 7 6
4. The body produces more of the hormones
_____ and progesterone during pregnancy. 3 7 8 7 6 4 3 6
5. Appetite may lessen if persistent _____
exists. 6 2 8 7 3 2
6. Eating dried fruits or _____ frequently
helps to control nausea. 2 7 2 2 5 3 7 7
7. _____ results sometimes because the
increased size of the uterus forces the
stomach out of its normal position. 4 3 2 7 8 2 8 7 6
8. A pregnant woman has about thirty percent
more _____ than before pregnancy. 2 5 6 6 3
9. _____ supplements are often prescribed to
maintain healthy blood. 4 7 6 6
10. Any _____ signals should be reported to
the doctor at once. 3 2 6 4 3 7



The female will tend to gain a pound a week during the last eight weeks of pregnancy. Therefore, care should be taken to avoid excessive gain in the middle trimester.

Ideal weight gain is about two to three pounds a month; if more than five pounds a month are gained, there is a reason for concern.

WEIGHT GAIN EXPECTATIONS

- 20-24 lbs.--desirable weight gain during pregnancy
- 7-7.5 lbs.--fetus
- 1-1.5 lbs.--placenta
- 2 lbs.--amniotic fluid
- 3.5 lbs.--expanded blood volume
- 2.5 lbs.--enlarged uterus
- 5 lbs.--increase in breast and general body (fluid, fat)

UNIT: Prenatal Development

CONCEPT: Psychological Changes During Pregnancy

GENERALIZATIONS

1. Recognizing motivation for parenthood and understanding responsibilities are a vital part of psychological adjustment.
2. Knowledge of characteristic emotional changes contributes to the confidence of expectant parents and minimizes psychological stress.
3. The quality of the relationships of family members and their ability to communicate can be a major factor influencing psychological adjustment.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Analyze factors related to motivation for parenthood.
2. Identify the psychological stages of pregnancy.
3. Discuss the causes of psychological stress and explain coping skills needed.

OUTLINE

- I. Psychological Aspects of Parenthood
 - A. Motivation for Parenthood
 - B. Planning for Parenthood
- II. Psychological Stages of Pregnancy
 - A. Incorporation (first trimester)
 - B. Differentiation (second trimester)
 - C. Separation (third trimester)
- III. Psychological Stresses of Pregnancy
 - A. Causes
 - B. Coping Skills

REVIEW OF SELECTED LITERATURE

Some reasons for choosing parenthood include the desire to love unselfishly and rear a child, to have someone to carry on the family name and business, to save a marriage, to satisfy a religious conviction, to be free of professional or social pressure, to seek prestige through parenthood, to prove virility, to satisfy parents who want grandchildren, to give a child a playmate, the parents' desire to have someone to love them, and to fulfill the expectation of society. The reason a couple has a child will affect the couple's ability to adjust to the pregnancy, the new role of parent, and the changes in the marital relationship that will occur.

There is no perfect time to have children. People who place the desire for parenthood after achieving a long list of material goals or when they have reached an ideal time may need to ask themselves if they should have children. Placing children secondary to long-range goals can indicate that they do not really want the responsibilities (Landis, 1977). Yet, planning children and spacing children because of a decision made usually contributes to better adjustment to parenthood.

Pregnancy is often a period of stress, and problems are inevitable. Even well-adjusted couples face a crisis. Self-esteem can be affected by pregnancy, and if the woman values herself primarily for her appearance and professional activities, pregnancy will cause more psychological stress than it would if these were less important. There is less stress if the pregnancy occurs after the couple has had enough time to adjust, solve their differences, enjoy each other, and achieve satisfaction in their marriage.

The psychological experience of pregnancy can be divided into three stages, or trimesters, that parallel the physical changes taking place (Colman & Colman, 1971). First trimester psychological changes have been called a process of "incorporation." During this time the woman must accept the fact that she is pregnant. Minor physical discomforts may include nausea, fatigue, a need to urinate more frequently, and changes in the breasts. Many women also experience fairly characteristic emotional changes during this period, such as feeling happy one minute and depressed the next.

The second trimester psychological change is called "differentiation." At this stage the mother must accept the developing fetus as a separate being. During this phase the relationship with the husband becomes more meaningful. Communication, support, frequent approval, and reassurance are important (Colman & Colman, 1971). If the father rejects the idea of becoming a parent, the mother may think that this is a personal rejection because the child is developing within her body (Westlake, 1972). Increased introversion and passivity of the expectant mother continue along with the characteristic mood swings. If the couple is enthusiastic about the birth of the child, this period provides opportunities for increasing intimacy in the relationship.

The psychological change in the third trimester is referred to as "separation," or giving up the fetus. The mother may be fearful about complications during delivery, the health of the child, and her own ability to cope with the child after he/she is born. The fears are common and the support of the husband can be very reassuring during this time (Colman & Colman, 1971).

Women who do not want the child they are expecting experience feelings of anxiety, depression, and guilt and are ashamed to confess these feelings. A doctor who encourages the pregnant woman to voice her concerns will relieve doubts and help her to maintain psychological equilibrium. Recognition of the fact that all these are normal stresses experienced by others will not make them less important to her, but she is encouraged to learn that she is not unique.

Psychological stress is experienced by the father also. Factors causing stress may include (1) role of parenthood with its new identities; (2) feelings of guilt because the child is unwanted; (3) parenthood without marriage; (4) consideration of abortion; (5) financial instability; (6) family conflict; (7) fear of unknown (health of child/childbirth); (8) fear of not loving the child; (9) change in job status; (10) economic and social deprivation; (11) fear of parental responsibilities; (12) pressures of mothers who must work during pregnancy; and (13) insecurity (will mate continue to love?) (Colman & Colman, 1971; Landis, 1977).

The couple may react to stress in negative ways, such as using drugs, like sleeping pills, alcohol, etc., crying, seeking escape (running away), dissolving the marriage (some marriages end under the stress of pregnancy). On the other hand the couple can cope in positive ways, such as verbalizing and communicating, becoming informed and learning to accept minor changes as normal, and getting medical attention.

Ultimately, psychological adjustment is dependent upon the woman's perception of the physical changes that occur, upon pre-existing psychological status, the ability to handle normal stress, (social, economic, and marital status, relationships with other people), and finally, the personal meaning the pregnancy has for those involved (Williams, 1977).

REFERENCES

- Colman, A. D., & Colman, L. L. Pregnancy: The psychological experience. New York: Herder & Herder, 1971.
- Landis, P. H. Your marriage and family living. New York: McGraw-Hill, 1977.
- Westlake, H. G. Relationships: A study in human behavior. Lexington, Massachusetts: Ginn, 1972.
- Williams, J. H. Psychology of women. New York: Norton, 1977.

LEARNING ACTIVITIES

1. Title: Writing Assignment

Description: List several reasons why people decide to have children. Select one of these reasons and write a short fiction story which illustrates that reason.

Materials Needed: Paper, pen

2. Title: Interviews and Discussion

Description: Interview fathers and mothers, asking about psychological changes they may have noticed during pregnancies. What worries and anxieties did they have? How did they cope with these worries? Use as a basis for discussion.

Materials Needed: Paper, pen

3. VOCABULARY

1. Psychological Changes--Differences in the mental and behavioral aspects of an individual.

INSTRUCTIONAL AIDS

1. Title: Filmstrip

Description: The following filmstrips might be useful when discussing psychological adjustments in pregnancy.

A. "Infant Care and Development Series, Set 1" includes Prenatal Care and Planning, The Family and the New Baby, Prenatal Responsibility, and A Baby's Day.

B. "Creating a Family: A Modern Tale"

Materials Needed: Filmstrips, filmstrip projector, tape player

Sources: A. "Infant Care and Development Series," McGraw-Hill Films, 1221 Avenue of the Americas, New York, NY 10020. \$69.00 for sound/record cassettes.

B. "Creating a Family: A Modern Tale," Butterick Publishing, 161 Sixth Avenue, New York, NY 10013.

2. Title: Transparency

Description: The transparency on "Psychological Stages of Pregnancy" (Figure #4) could be used when discussing this topic.

Materials Needed: Transparency materials, overhead projector

3. Title: Bulletin Board

Description: "Reacting to Stress During Pregnancy" (Figure #5) could be used when discussing this topic.

Materials Needed: Dark calico print background, yellow poster paper for faces, letters, markers

EVALUATION

Title: Written Test

Description: Respond in writing to the questions listed below.

1. List five reasons why parents decide to have children.

Desire to love and rear a child, someone to carry on family name or business, save a marriage, satisfy a religious conviction, to be free of professional or social pressure, prestige, prove virility, satisfy grandparents, to give a child a playmate, to have someone to love them.

2. List and describe the three psychological stages that occur during pregnancy.

- A. Incorporation--Accepting the fact of pregnancy.
- B. Differentiation--Accepting the developing fetus as a separate being.
- C. Separation--Accepting the fact that the baby is a separate individual.

3. List ten factors that may cause stress for the expectant father.

New identity, guilt if the baby is unwanted, parenthood without marriage, consideration of abortion, financial instability, family conflict, fear of unknown, fear of not loving the child, change in job status, social deprivation, fear of responsibility, pressures of mothers who must work during pregnancy, insecurity.

4. Couples can react to stress in various ways. Name some positive reactions to stress during pregnancy.

Verbalization and communicating, becoming more informed, learning to accept minor changes as normal, getting medical attention.

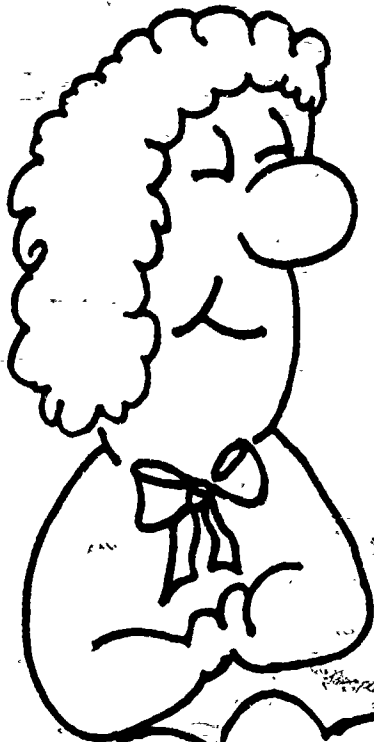
Materials Needed: Paper, pen

Figure #4

PSYCHOLOGICAL STAGES OF PREGNANCY

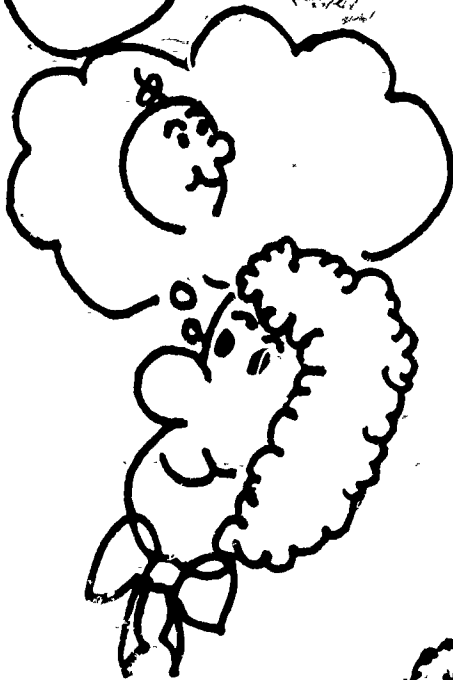
INCORPORATION

Accepting the fact that she is pregnant.



DIFFERENTIATION

Accepting the developing fetus
as a separate being.

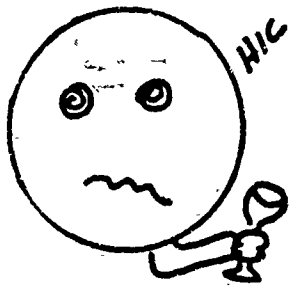


SEPARATION

Accepting the fact
that the baby is a
separate individual.



Figure #5



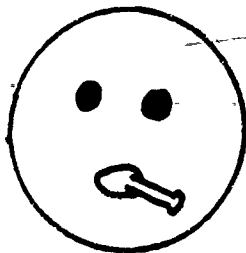
Using drugs, sleeping pills, alcohol



Crying



Verbalizing and Communicating



Getting medical attention

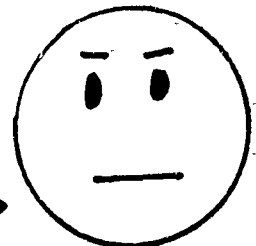
REACTING TO
STRESS DURING
PREGNANCY



Seeking Escape
(running away)



Dissolving



the Marriage

UNIT: Prenatal Development

CONCEPT: Health Care of the Expectant Female

GENERALIZATIONS

1. For effective prenatal care, the female needs regular and thorough examinations by a physician.
2. Health habits of the mother influence the physical development of the unborn child.
3. The cost of medical treatment during pregnancy may be a major expense in some families.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Describe the doctor's first examinations of the expectant mother.
2. Discuss the importance of early medical care.
3. Identify the general procedure for routine pregnancy examinations.

OUTLINE

I. Early Medical Care

A. Importance

B. First Examination Procedure

1. General health history
2. Measurements
3. Laboratory tests
4. General physical examination

C. Health Habits

II. Subsequent Medical Care

A. Frequency

B. Medical Factors

C. Questions

D. Dental Care

III. Cost of Medical Care

REVIEW OF SELECTED LITERATURE

The goal of health care during pregnancy is maintaining the good health of the mother, which will enable her to produce a healthy, normal infant and remain healthy herself. The importance of prenatal care cannot be overemphasized. Statistical evidence shows that the earlier a pregnant woman seeks medical care, the higher the chance that she will have a perfectly normal pregnancy and healthy baby. By the time a woman has missed her second menstrual period, she should have begun her prenatal care under medical supervision (Brisbane & Riker, 1965).

An initial visit to a physician during pregnancy usually includes a health history, physical examination, family history of diseases, past pregnancy history, weight history, and probable date the baby is due. The expectant mother will have abdominal measurements taken and laboratory tests made. Pulse, blood pressure, and weight are recorded. Urinalysis and blood tests, including blood count and type, are done. The breast, abdomen, pelvis, and vagina are examined (Hutchins, 1979).

At the time of the first medical examination, the physician should also provide general information regarding the pregnancy. This information will probably include advice regarding the management of the common complaints of pregnancy as well as a list of the signs and symptoms that may be of importance and should be reported to the doctor. Advice will be given regarding nutrition, diet, exercise, and other health habits. To be certain that no important instructions are overlooked, most obstetricians provide their patients with a printed booklet containing this essential information.

In general, women should practice good health habits on a day-to-day basis. These include adequate exercise, rest and sleep, body cleanliness, balanced diet, and dental care.

Subsequent visits that the pregnant woman makes to the doctor should follow a standard routine, unless for some reason the doctor believes more frequent visits are necessary. Visits are usually every four weeks until the twenty-eighth week of pregnancy. Thereafter, they are every two weeks until the thirty-sixth week and then every week until delivery.

At each visit, the expectant mother will be weighed, the urine tested, blood pressure taken and recorded, and the abdomen and general condition of the limbs, especially the ankles, inspected. Unless there is some specific reason for another internal examination, it is not usually repeated until near the thirty-sixth week. Blood samples are taken at intervals and more frequently if there is evidence of anemia. At each visit, the expectant mother should report any symptoms that are troublesome or ask any questions she may have concerning the pregnancy.

Complicated dental work should not be done during pregnancy. However, the mother's teeth should be checked early during pregnancy and any necessary work done at that time. The dentist should be informed about the pregnancy in order that precautions related to anesthetics and x-ray can be observed.

The cost of medical treatment and hospitalization during pregnancy and childbirth is a major expense in most families. Adequate medical attention during pregnancy, delivery, and the postpartum period is so important to the total health of a mother and her child that it becomes mandatory.

Hospital costs tend to move up or down with the rest of the economy. Doctors usually charge a specified amount for care during pregnancy, delivery, and the weeks following pregnancy when a woman's body is returning to its normal state. Fees vary from community to community, but the doctor and hospital are usually willing to work out payment over a specified period of time. Hospital insurance may help in eliminating some of the medical expenses of the pregnancy. There are usually enrollment considerations in insurance policies, such as time limits; therefore, the expense and manner of payment should be considered well in advance of the pregnancy.

With a medically well-supervised pregnancy, most women will give birth to a healthy baby and remain in good health themselves. It is important to remember that prenatal care is not care for an illness, but care for a normal, healthy condition.

REFERENCES

- Brisbane, H. E. & Riker, A. P. The developing child. Peoria, Illinois: Charles A. Bennett, 1965.
- Hutchins, B. Child nutrition and health. New York: McGraw-Hill, 1979.

LEARNING ACTIVITIES

1. Title: Research Projects

Description: Research the cost of medical care and hospitalization during pregnancy, delivery, and postpartum care. Through local agencies, research maternity insurance coverage and investigate any other alternate methods of defraying costs. Report findings in class.

Materials Needed: References, listing of insurance companies, and hospitals

2. Title: Guest Speaker

Description: Invite a doctor to explain the importance of good doctor-patient relationship during pregnancy, the first examination, and the importance of early medical care.

Materials Needed: Letter confirming time and date, thank you letter

3. VOCABULARY

1. Gynecologist--A doctor who specializes in the care and treatment of women.
2. Obstetrician--A doctor who specializes in pregnancy and child birth.

INSTRUCTIONAL AID

Title: Transparency

Description: Use a transparency on "Visits to the Doctor" (Figure #6) when discussing this topic.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Writing Assignment

Description: React in writing to one of these:

1. Describe the doctor's first examination of the expectant mother.
2. Discuss the importance of early medical care for expectant mothers.

Materials Needed: Paper, pen

Figure #6

VISITS TO THE DOCTOR

I. INITIAL VISIT

- A. HEALTH HISTORY AND PAST PREGNANCY HISTORY
- B. PHYSICAL EXAMINATION WHICH INCLUDES EXAMINATION OF BREASTS, ABDOMEN, PELVIS, AND VAGINA
- C. WEIGHT, PULSE, BLOOD PRESSURE
- D. PROBABLE DUE DATE--THE DATE OF THE LAST MENSTRUAL PERIOD WILL BE NEEDED
- E. URINALYSIS AND BLOOD TESTS
- F. ADVICE ON CARE DURING PREGNANCY

II. OTHER VISITS

- A. SPACING BASED ON LENGTH OF TIME UNTIL DELIVERY
- B. WEIGHT
- C. URINE TEST
- D. BLOOD PRESSURE
- E. ABDOMEN AND GENERAL CONDITION OF LIMBS, ESPECIALLY THE ANKLES, INSPECTED
- F. CHANCE TO REPORT ANY PROBLEMS AND DISCOMFORTS
- G. BLOOD TESTS IF ANEMIA IS INDICATED

UNIT: Prenatal Development

CONCEPT: Nutrition and Exercise

GENERALIZATIONS

1. The mother's nutritional state during pregnancy influences the baby's health at birth.
2. During pregnancy the mother is responsible for meeting both her nutritional needs and those of her developing baby.
3. Pregnancy necessitates adjustment in physical activities.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify nutritional needs of the expectant mother.
2. Cite the role of exercise during pregnancy.
3. Discuss the importance and benefits of a well-balanced diet.

OUTLINE

I. Nutrition

- A. Importance
- B. Benefits of Good Nutrition
- C. Nutritional Needs

II. Exercise

- A. Importance
- B. Function of Exercise
- C. Benefits

REVIEW OF SELECTED LITERATURE

The mother's health and nutritional state during pregnancy determines how healthy the infant will be at birth. It is the mother's responsibility to meet both her nutritional needs and those of her developing child (Hutchins, 1977). Good nutritional condition before pregnancy provides the best possible environment for the baby from the

very beginning. Good nutrition is very important during pregnancy because this is the period when the baby will grow at the most rapid rate.

Fewer complications in pregnancy, fewer premature births, and healthier babies result when the mother is well-nourished prior to conception. Severe congenital malformations involving the skeleton, the central nervous system, the cardiovascular system, and the excretory system can be produced in the fetus when the mother's diet is deficient.

Many women do not enter pregnancy in a satisfactory nutritional state. One-fourth of all first pregnancies occur in teenage girls, who are known to have the least satisfactory diet of any age category (Broadribb & Corliss, 1973).

Studies which have analyzed and rated the diets of pregnant women note the following results: (1) women who follow a poor or very poor diet during pregnancy have a larger percentage of premature, congenitally defective, or stillborn infants; (2) women with good to excellent diets almost invariably have infants in good physical condition; (3) few cases of eclampsia (an acute nervous affection attended by convulsions, with loss of consciousness) are noted in those women receiving excellent or good diets; and (4) a good percentage of those receiving poor or very poor diets develop toxemia of varying degrees of severity (Broadribb & Corliss, 1973).

The human body, and especially the baby, requires a great variety of foods, including minerals, for growth and development; the vast majority of these requirements may be met by simply adhering to a normal balanced diet. The diet should contain (1) adequate protein, (2) fresh fruit and vegetables, (3) moderate amounts of carbohydrates, (4) moderate amounts of fat, and (5) adequate fluid. The basic four food groups provide a model for a well-balanced diet.

Fetal demands on the mother's system may require certain supplements to her diet. One-third of the mother's supply of iron is needed for the building of the blood of the fetus. Even if there is no deficiency, the physician often prescribes iron capsules. Ascorbic acid is recommended to facilitate the absorption of iron. Supplements of vitamins and calcium are left to the judgment of the physician. Lack of calcium can cause muscle spasms and leg cramps commonly experienced in the twenty-fourth to the thirty-sixth week of pregnancy (Worthington, Vermeersch, & Williams, 1977). Also, insufficient calcium will impair ossification (changing from soft cartilage to true bone) of bones and teeth of the fetus (Pikunas, 1976).

The average optimal gain in pregnancy is twenty to twenty-four pounds, and there is no scientific reason for limiting it to lesser amounts. Well-fed women gain a little more, thin women more, fat women less, and women having first babies more. Pregnancy is not a time to reduce (Smart & Smart, 1977). Extreme restriction of calories can be harmful to both mother and baby. Women who have dieted during pregnancy,

at the expense of nutrients, have seen the effects on their babies (Hutchins, 1979).

A pregnant woman should exercise daily as a means of maintaining good muscle tone and circulation. Exercise can offer many other benefits, such as helping to alleviate constipation, a common problem during pregnancy.

Pregnant women need exercise which should be in addition to the exercise received on the job or doing housework. A general rule of thumb is that the exercise done should not overtire or strain the woman. Therefore, she is usually the best judge about her exercise. In a normal pregnancy, the same kinds of sports activities can be carried out during pregnancy as before. For example, if a woman is accustomed to swimming, there is no reason why she cannot continue to do so after she becomes pregnant. This period would not be a good time to take up a new sports skill, such as water skiing, but any activity the woman is used to participating in can generally be continued. If there are questions concerning exercise, the physician should be consulted.

During the last few months of pregnancy, ligaments of the lower back and pelvis become looser, and one's balance, coordination, and reflex timing are apt to be altered. These facts should be considered in the exercise program.

The pregnant woman may want to participate in a planned exercise program designed to strengthen and tone muscles in preparation for labor. These types of exercises can be recommended by her doctor and are often taught as part of prepared childbirth classes.

REFERENCES

- Broadribb, V., & Corliss, C. Maternal-Child nursing. Philadelphia: Lippincott, 1973.
- Hutchins, B. Child nutrition and health. New York: McGraw-Hill, 1979.
- Pikunas, J. Human development: An emergent science. New York: McGraw-Hill, 1976.
- Smart, M., & Smart, R. Children: Development and relationships. New York: Macmillan, 1977.
- Worthington, B. S., Vermeersch, J., & Williams, S. R. Nutrition in pregnancy and lactation. St. Louis: C. V. Mosby, 1977.

LEARNING ACTIVITIES

1. Title: Poster Projects

Description: Make posters on good nutrition for expectant mothers. Creativity and accuracy are important criteria. Display in an obstetrician's office.

Materials Needed: Poster paper, markers

2. Title: Class Discussion and Research

Description: There are a lot of superstitions and "old wives' tales" about foods and pregnant women. Compile a list and investigate accuracy of the ideas. The following are examples of untrue superstitions.

1. Drinking wine makes good blood.
2. No matter how good your diet, you'll lose a tooth for every baby you have.
3. You're eating for two; therefore, you must eat twice as much.
4. If you eat a lot of strawberries, the baby will have a strawberry birthmark.

Materials Needed: Related reference books

Reference: Adapted from Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

3. Title: Interviews

Description: The food cravings of pregnant women are often mentioned. Interview mothers and find out if they had cravings, how severe they were, and what foods they craved. Compile results in class and discuss.

Materials Needed: Paper, pen

4. Title: Meal Planning

Description: Research food requirements for expectant mothers, determine differences from the normal adult diet, and plan a day's menu for a pregnant woman.

Materials Needed: Reference books

5. Title: Popcorn Session

Description: In a popcorn session (students responding spontaneously and as quickly as possible), identify "do's and don'ts for the expectant mother" concerning nutrition and exercise. Record in notebooks later. Examples: Do get plenty of rest. Don't eat rich desserts. Do eat well-balanced meals. Don't diet.

Materials Needed: None

6. Title: Word Search

Description: Complete "Nutrition and Exercise" (Student Handout #3) word search game.

Key: Word Search

h'c y n d e e z b (m u i c l a c) i	1. nutritional
a (t o x e m i a) l y b o u t k s l	2. teenage
r e o d e l i v e r y l t i v o a	3. toxemia
m e l x y (n u t r i t i o n a l) b i	4. calories
f n (a s c o r b i c) p a l o t d o	5. blood
u a . l q b a b y s p v y i t d e r	6. ascorbic
l g (c i r c u l a t i o n) i y n s	7. calcium
m e m b r a n e (s e i r o l a c) y	8. harmful
	9. circulation
	10. labor

Materials Needed: Copies of game

INSTRUCTIONAL AID

Title: Transparency

Description: The transparency "Good Nutrition" (Figure #7) can be used when talking about advantages of good nutrition during pregnancy.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Pretest

Description: The following true-false statements could be used as a basis for a pretest.

Write "true" if the statement is true and "false" if the statement is not true.

True 1. Good nutritional health before pregnancy provides a good environment for a baby from the very beginning.

True 2. The mother's diet is important for development of baby's skeleton, nervous system, and cardiovascular system before she may even realize she is pregnant.

- True 3. Women who follow a poor diet during pregnancy have a large percentage of premature, congenitally defective, or stillborn infants.
- False 4. The expectant mother is eating for two; therefore she should eat twice as much food.
- True 5. One-third of the mother's supply of iron is needed for the building of blood of the fetus.
- False 6. Lack of calcium can cause muscle spasms and leg cramps for the mother, but will not affect the development of the fetus.
- True 7. The average optimal gain during pregnancy is twenty to twenty-four pounds.
- True 8. A pregnant woman should exercise daily.
- False 9. Pregnancy is a good time to develop an interest in a new sport.
- True 10. There are planned exercise programs designed to strengthen and tone muscles in preparation for labor.

Materials Needed: Copies of statements

TAKE NOTE



44

<input type="radio"/>	Good nutrition helps to prevent--
<input type="radio"/>	
1	Stillbirths
2	Birth defects
3	Small birth size
4	Infant illness
5	Physical weakness
6	Extreme nervousness
<input type="radio"/>	

Nutrition and Exercise - Prenatal Development
Student Handout #3

H C Y N D E E Z B M U I C L A C I
A T O X E M I A L Y B O U T K S L
R E O D E L I V E R Y L T I V O A
M E L X Y N U T R I T I O N A L B
F N A S C O R B I C P A L O T D O
U A L Q B A B Y S P V Y I T D E R
L G C I R C U L A T I O N I Y N S
M E M B R A N E S E I R O L A C Y

1. The mother's _____ state before and during pregnancy affects the health of the baby at birth.
2. One-fourth of all first pregnancies occur in _____ girls, who very often are not eating adequately.
3. A good percentage of women receiving poor diets develop _____.
4. A well-balanced diet is more important than an increase in _____.
5. Iron supplements are often prescribed because one-third of the mother's supply of iron is needed for the building of the _____ of the fetus.
6. _____ acid is needed to help in the absorption of iron.
7. Inadequate amounts of _____ will impair ossification of bones and teeth of the fetus.
8. Extreme restriction of calories can be _____ to both mother and baby.
9. A pregnant woman should exercise daily in order to maintain good muscle tone and _____.
10. Some doctors recommend special exercise programs designed to strengthen muscles in preparation for _____.

UNIT: Prenatal Development

CONCEPT: Environmental Influences on Prenatal Development

GENERALIZATIONS

1. Environmental influences are of major concern during the early stages of pregnancy.
2. During the first three months, the embryo is most susceptible to damage from outside agents, such as drugs, alcohol, tobacco, and diseases.
3. Smokers have more miscarriages, stillbirths, and infant deaths than non-smokers.
4. Drugs, even common drugs available in any drug store and without a prescription, can cause severe damage to the embryo.
5. Mothers who drink alcoholic beverages excessively have been linked to what is known as the "fetal alcohol syndrome."
6. Rubella or German Measles is the most widely known of embryo-damaging diseases.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify maternal habits during pregnancy that affect the infant's development.
2. List some common drugs that may cause damage to the embryo.
3. Describe how a mother's smoking may be harmful to her baby.
4. Define "fetal alcohol syndrome."
5. Discuss the effects of disease on the developing embryo.

OUTLINE

- I. Role of the Placenta
- II. Environmental Influences
 - A. Drugs
 - B. Alcohol
 - C. Tobacco
- III. Maternal Diseases and Disorders

REVIEW OF SELECTED LITERATURE

During the first three months of pregnancy and as a result of the tremendous growth, development of organs, and differentiation of cells, the growing fetus is most susceptible to damage from outside agents, such as drugs, alcohol, tobacco, and diseases. Although there is no direct connection between the mother and the baby, the organ known as the "placenta" does provide an indirect connection between mother and fetus.

The placenta, which is a blood-filled spongy mass that grows in size with the baby, attaches itself to the uterine wall and has two separate sets of blood vessels. One set of blood vessels goes to and from the baby through the umbilical cord, and the other set goes to and from the mother through arteries and veins supplying the placenta. Maternal and fetal blood vessel systems lie side by side and are intermeshed, but totally separate from each other. The placenta is the organ through which the baby receives food, oxygen, and other chemical substances from the mother while returning the waste material from the baby to be disposed of by the mother's body. The placenta is not capable of screening out potentially dangerous substances; therefore, anything that enters the mother's blood stream can be transferred to the baby through the placenta.

Most drugs are simple chemicals which, when introduced into the mother, will pass from her circulatory system to that of the fetus because of a lower concentration on the fetal side of the placenta. Some of the drugs are beneficial, but some are harmful and capable of causing damage or trouble to the fetus. These drugs known to cause or produce malformations or deviations from the norm are called "teratogens."

During pregnancy a woman should be extremely careful when taking any kind of drug or medication. It is not wise for a pregnant woman to take any kind of medication, even aspirin, without first consulting her doctor. Some drugs which are specifically known to have teratogenic effects are tranquilizers, steroids, and antibiotics. If the mother is taking an addictive drug, the baby, in addition to possible birth defects, is most likely to be born with a low birth weight and other signs of immaturity. The child can also be born addicted to the drug and have to go through withdrawal following birth.

The potential damage of drugs lies in two major areas. First, the proper dosage for a mother will be a very large overdose for the fetus. Second, the fetal liver is incapable of breaking down the drugs in the same way as the maternal liver enzymes do; as a result, the drug remains unchanged and acts on the fetus in a different way than it does on the mother.

No chemical known to science has been proved to be entirely harmless for all pregnant women and their babies during all stages of pregnancy. Hence, the expectant mother should not take any drug during pregnancy or potential pregnancy unless there is a specific medical need for it and it has been prescribed by the physician.

About one million American women of childbearing age are alcoholics. Many more are social drinkers. Doctors have been concerned because alcohol does cross the placenta and remain highly concentrated for long periods of time in the body of the unborn child. If the mother has a drink of beer, wine, or hard liquor, the unborn baby has a drink too. Because the baby is very small, it is affected much faster than the mother (Papalia & Olds, 1979). Alcohol can also have serious, long-lasting effects on an unborn baby.

Scientists have found that many children born to women who drink excessively while pregnant have a pattern of physical and mental birth defects. This problem is called "fetal alcohol syndrome." Most affected youngsters have small brains and show degrees of mental deficiency. Many are jittery, poorly coordinated, and have short attention spans and behavioral problems.

Fetal alcohol syndrome babies usually have narrow eyes and low nasal bridges with short upturned noses. These facial features make them look more like one another than like their parents or siblings. Half of these children also have heart defects.

No one knows how much alcohol is too much. Many doctors are recommending that women not drink alcoholic beverages during pregnancy or, if they do, to drink very sparingly and with the knowledge that alcohol does cross the placenta.

Smoking has also been linked to prenatal problems. Smokers have more miscarriages, stillbirths, and infant deaths than non-smokers. The babies of smokers are usually smaller at birth than non-smokers. Physiologically, when the pregnant mother smokes a cigarette, very quickly the uterine and placenta blood vessels contract, reducing the oxygen and food supply to the embryo. This reaction occurs every time the mother smokes, whether she is a heavy or an occasional smoker. When a mother smokes, so does her baby.

Disease can cause damage to the developing embryo. Rubella, or German Measles, is the most widely known of embryo-damaging diseases. It can cause mental retardation and vision, hearing, and heart defects. Pregnant women should stay away from places where they might be infected.

Viral diseases contracted by the mother may damage the fetus. Some of these infections are hepatitis, rubeola, syphilis, smallpox, chicken pox, and scarlet fever. Tuberculosis and malaria are also dangerous to the fetus. Mumps is known to cross the placenta, but how often, if at all, it harms the baby is not known.

Maternal disorders during pregnancy can cause negative effects upon the fetus. Extreme endocrine disorders can cause mongolism and microcephaly. Extreme thyroid deficiency can cause cretinism. These are strong reasons for a thorough medical examination before and during pregnancy (Helms & Turner, 1981).

Scientists and physicians suspect that there are even more sources of potential harm than have yet been proved. Other environmental factors, such as diet and general health of the mother, also play a role. Maternal age is another environmental factor. Some birth defects can be prevented. Potential parents should pay close attention to scientific knowledge available and carefully follow their physicians' advice.

REFERENCES

- Helms, D. B., & Turner, J. S. Exploring child behavior (2nd Ed.)
New York: Holt, 1981.
- Papalia, D. E., & Olds, S. W. A child's world: Infancy through adolescence. New York: McGraw-Hill, 1979.

LEARNING ACTIVITIES

1. Title: Student Reports

Description: Select a disease that affects the developing embryo. Some suggestions of the diseases may be rubella, hepatitis, syphilis, smallpox, chicken pox, scarlet fever. Write a report on the selected disease and present the report to the class.

Materials Needed: References from March of Dimes, local health unit, family physician, and librarian

2. Title: Crossword Puzzle

Description: Complete the crossword puzzle "Environmental Influences on Prenatal Development" (Student Handout #4).

<u>Key:</u>	<u>Across</u>	<u>Down</u>
	4. Weight	1. Contract
	6. Three	2. Placenta
	7. Oxygen	3. Alcohol
		5. German

Materials Needed: Copies of puzzle

3. Title: Homework Assignment

Description: The day before beginning this lesson, have the students search for the answers to these questions:

1. What is thalidomide?
2. Why was it given to pregnant women?
3. What were the results of thalidomide?

Discuss this drug when talking about the effects of drugs on pregnant women.

Materials Needed: Reference books

4. VOCABULARY

1. Placenta--The organ by which the fetus is nourished. It is connected with the fetus on one side by the umbilical cord and on the other side it is attached to the walls of the uterus.
2. Teratogen Drugs--Drugs known to cause malformations in fetal development.

INSTRUCTIONAL AID

Title: Transparencies

Description: Transparencies entitled "Effects of Drinking" (Figure #8) and "Effects of Smoking" (Figure #9) could be used when discussing environmental causes of birth defects.

Materials Needed: Transparencies, transparency pens, overhead projector

EVALUATION

Title: Written Assignment

Description: Ask the students to answer questions giving as much of a detailed answer as possible.

1. List as many environment factors as you can that affect the developing embryo.

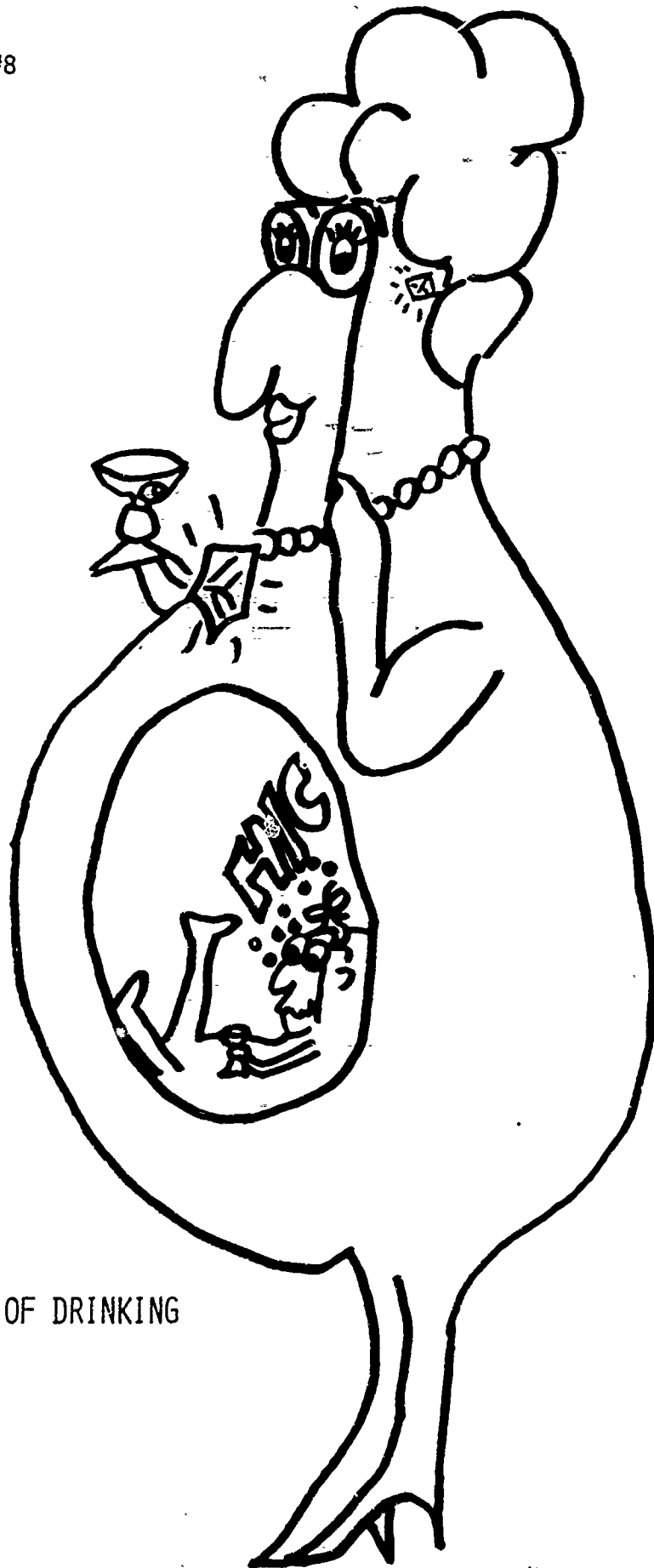
Suggested answers are drugs, alcohol, tobacco, diseases such as rubella, hepatitis, syphilis, smallpox, and scarlet fever.

2. Describe how smoking can be harmful to the unborn child.

Smokers have more miscarriages, stillbirths and infant deaths than non-smokers. Smoking also causes the uterine and placenta blood vessels to contract, reducing the oxygen and food supply to the embryo.

Materials Needed: Copies of the questions

Figure #8



EFFECTS OF DRINKING

Figure #9



EFFECTS OF SMOKING

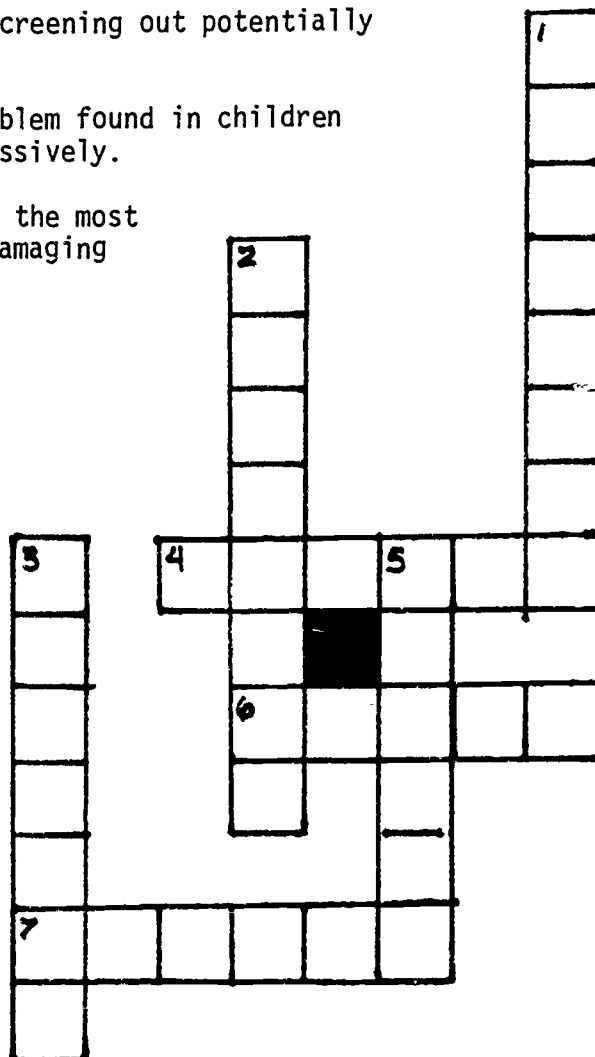
Environmental Influences on Prenatal Development - Crossword Puzzle
 Student Handout #4

Across

4. If an expectant mother is taking an addictive drug, the baby is more likely to have birth defects and low birth _____. The baby may also be born addicted to the drug.
6. The developing embryo/fetus is most susceptible to environmental factors and outside agents during the first _____ months.
7. The placenta is the organ through which the embryo/fetus receives food and _____.

Down

1. When an expectant mother smokes a cigarette, the uterine and placenta blood vessels _____.
2. The _____ is not capable of screening out potentially dangerous substances.
3. Fetal _____ Syndrome is a problem found in children born to women who drink excessively.
5. Rubella, or _____ Measles, is the most widely known of the embryo-damaging diseases.



UNIT: Prenatal Development

CONCEPT: Childbirth Techniques

GENERALIZATIONS

1. Childbirth education has become increasingly popular for couples.
2. Many childbirth education groups are advocating prepared childbirth.
3. Fathers are becoming more involved in the childbirth process.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Discuss changing attitudes and practices in childbirth.
2. Identify childbirth techniques.
3. Describe possible roles for the father in childbirth.

OUTLINE

- I. Childbirth Techniques
 - A. Influences of Cultures
 1. Birth as a painful or natural experience
 2. Observance of birth with secrecy
 3. Birth as an obstetrician's accomplishment
 - B. Trends
- II. Methods of Childbirth Techniques
 - A. Traditional
 1. Relief of pain
 2. Freedom from fear
 3. Anesthesia
 4. Safety
 - B. Natural
 1. Read theory
 2. Bradley theory
 - C. Prepared Childbirth

1. Positive attitude
2. Knowledge and confidence
3. Relaxation and breathing techniques
4. Participation of father as a labor coach

III. Childbirth Technique Decisions

REVIEW OF SELECTED LITERATURE

Society's attitudes and practices surrounding childbirth techniques are changing rapidly. Some of these attitudes reflect contrasting influences of other cultures. For example, (1) viewing birth as a painful experience, or as a natural experience; (2) practicing very open observance of birth, or surrounding birth with secrecy; (3) viewing the event as an obstetrician's accomplishment, excluding fathers, as opposed to birth as a family affair. Many of these attitudes and practices are evident in present-day childbirth techniques.

There is also a trend among some couples, mostly in the well-educated middle class, of avoiding hospitals and having their babies at home. Although some people advocate home deliveries only for financial reasons, there are those who believe that birth is a healthful and joyful event to be celebrated by the family (Ambron, 1981). A couple may be aided in the delivery by a midwife. A midwife is usually trained in obstetrical care, and in some areas of the country, midwives are being used by physicians to aid in patient care. However, when a couple elects to have a baby at home, they should realize that if a medical problem should arise during delivery, the mother and baby would be without the aid of modern medical technology.

Some of the present-day childbirth techniques can be classified as (1) traditional, (2) natural, and (3) prepared (Helms & Turner, 1981). For the mother, objectives of traditional childbirth are (1) relief of pain; (2) freedom from fear; (3) some degree of anesthesia; and (4) safe, relatively painless delivery. The objectives for the infant are to improve the progress of labor and to make delivery less traumatic (Ambron, 1981).

Traditional childbirth takes place in the hospital where medications and medical techniques are administered under the supervision of a physician. Pain during the first stage of labor can be alleviated by sedation, anesthesia, and analgesia. In traditional childbirth, kinds of medication used in the second stage of labor include inhalent, local and direct infiltration anesthesia, pudental nerve block, continuous lumbar epidural analgesia, and spinal anesthetic or saddleblock. Variations from the birth norm that require special medication are breech presentations, caesarian birth, and forcep delivery. These require sedation and a skilled physician (Papalia & Olds, 1979).

The traditional American way in childbirth, in addition to medication, usually employs these procedures: the mother gives birth behind closed doors; the father is relegated to the waiting room; and the baby is placed behind glass in a nursery.

Grantly Dick-Read, the originator of the term "natural childbirth," identified the fear-tension-pain cycle in childbirth and developed a program of preparation for the cycle. The program consisted of educating the expectant mother about pregnancy, labor, and delivery, employing tactics of relaxation, physical conditioning, and controlled breathing (Dick-Read, 1959). Emotional support from the father as well as medical personnel was important to Dick-Read's theory. He did not utilize the father as labor coach as extensively as most present methods do.

Robert A. Bradley, a Denver obstetrician, called his technique "true natural childbirth." He also called his method of preparation "husband-coached childbirth." His method began with an interest in and a modification of Read's method. Bradley's theory included a belief in (1) the power of serenity in making birth a pleasant experience, (2) the role of the father-coach to help maintain serenity, and (3) the fact that serenity and excitement are compatible. His method is based on imitating the instinctual behavior of mammals in labor. Bradley advocated a prenatal preparation program consisting of childbirth education, exercise, special breathing and relaxation techniques, and thorough preparation of the father who actively participates throughout the birth process (Bradley, 1965).

By the middle of the century, Dr. Fernand Lamaze, a French obstetrician, began to use the psychoprophylactic method of obstetrics, often termed as "prepared childbirth." Lamaze method is based upon the principle of conditioned response. Elements of the Lamaze method are a positive attitude, knowledge, confidence, relaxation, and breathing techniques. There are recommended body-building exercises to provide support during pregnancy. Both mother and father are active participants in the birth process. The father participates as a labor coach. Lamaze method advocates the use of anesthetic and obstetrical techniques whenever required; however, less medication is needed during labor. The Lamaze method is the prepared technique most widely used in the United States (Papalia & Olds, 1975).

Natural childbirth and prepared childbirth have been rapidly gaining advocates among parents and physicians. Both methods stress a minimum amount of medication. Their rapid spread in recent years can be attributed to two principal factors. First, there are psychological benefits for the parents, for the conscious mother who actively participates in her child's birth and thus knows and enjoys the experience of childbirth, and for the father who can assist his wife throughout her labor and delivery and thus knows the joy of participation in the birth of his child. Second, the most far-reaching effects will be felt by the babies themselves because of decreased medical risks resulting from the minimum use of medication.

REFERENCES

- Ambron, S. R. Child development (3rd ed.) New York: Holt, 1981.
- Bradley, R. A. Husband coached childbirth. New York: Harper & Row, 1965.

Dick-Read, G. Childbirth without fear. New York: Harper & Row, 1959.

Helms, D. B., & Turner, J. S. Exploring child behavior (2nd ed.)
New York: Holt, 1981.

Papalia, D. E., & Olds, S. W. A child's world: Infancy through
adolescence. New York: McGraw-Hill, 1979.

LEARNING ACTIVITIES

1. Title: Field Trip

Description: Visit a hospital. Have a nurse or hospital personnel give a tour of the labor room, delivery room, nursery and talk to the class. Suggested topics for speaker to address: (1) kind of treatment in these rooms and who gives the treatment (nurse, doctor); (2) differences between a private, double, and ward room; (3) treatment the mother receives while staying in the hospital after the birth; (4) treatment the baby receives; (5) cost of having a baby - hospital vs. home, traditional vs. natural vs. caesarean; (6) cost of rooms - private, double, ward, rooming-in; and (7) average length of hospital stay.

Materials and Arrangements Needed: Arrangements with the hospital, permission of principal, permission slips, transportation arrangements, thank you letter

2. Title: Guest Speaker

Description: Have a nurse or doctor speak to the class about childbirth techniques. Conduct a class discussion during which students prepare a questionnaire in advance to present to the doctor or nurse. This may be sent to the doctor in advance. Suggested questions speaker could answer:

1. Types of medication used (Anesthesia)
 - a. inhalent
 - b. local
 - c. direct
 - d. pudental nerve block
 - e. spinal anestheticHow are they used and their purposes?

2. Variations from the birth norm.
 - a. breech presentation
 - b. caesarean birth
 - c. forcep deliveryWhy are these done and how?

3. Have the speaker briefly differentiate between prepared and natural childbirth techniques.

4. Have the speaker briefly discuss postpartum care, episiotomies, clamping the cord at the moment of delivery, and the various costs of delivery.

Materials Needed: Letter confirming time and date, thank you letter

3. Title: Guest Speaker

Description: Call the local hospital for a referral to a Lamaze instructor. Ask the Lamaze instructor to explain the technique. If possible the instructor may show a film of the Lamaze method.

Materials Needed: Letter confirming date and time, thank you letter, projector

4. VOCABULARY

1. Midwife--A lay woman trained to help other women in childbirth.
2. Sedation--Medicine given to relax a person, which is useful in relieving pain and has a tranquilizing effect.
3. Anesthesia--Loss of bodily sensation or feeling.
4. Postpartum Care--Care after the birth of a child.

INSTRUCTIONAL AID

Title: Transparency

Description: The transparency entitled "Methods of Childbirth" (Figure #10) could be used when discussing this topic.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Writing Assignment

Description: Describe the possible roles of the father in traditional, natural, and prepared childbirth techniques.

Materials Needed: Paper, pen

METHODS OF CHILDBIRTH

A. TRADITIONAL

1. RELIEF FROM PAIN AND FREEDOM FROM FEAR
2. ANESTHESIA
3. SAFETY

B. NATURAL

1. READ THEORY
2. BRADLEY THEORY

C. PREPARED CHILDBIRTH

1. POSITIVE ATTITUDE
2. KNOWLEDGE AND CONFIDENCE
3. RELAXATION AND BREATHING TECHNIQUES
4. PARTICIPATION OF FATHER

UNIT: Prenatal

CONCEPT: Birth Process

GENERALIZATIONS

1. A hormonal message from the pituitary gland is responsible for changes in the pregnant woman that prepare her for delivery.
2. Approaching labor is indicated by three signs.
3. Childbirth takes place in three stages.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List signs of approaching delivery.
2. Discuss the process of labor and delivery.

OUTLINE

I. Birth Process

A. Delivery Preparation

1. Uterus
2. Lowering of fetus in the pelvic cavity
3. Cervix

B. Labor Signs

1. Regular uterine contractions
2. Blood-tinged mucus from cervix
3. Rupture of amniotic membrane

C. Stages of Labor

1. Dilation
2. Expulsion
3. Afterbirth

II. Birth Process Complications

A. Hemorrhaging

1. Breaking of the blood vessels of the brain

B. Lack of Oxygen

III. Special Labor and Delivery

A. Caesarean Section

B. Breech Birth

C. Induced Labor

D. Anesthetics

REVIEW OF SELECTED LITERATURE

Certain preparatory changes that take place before childbirth are the following: (1) the uterus sinks downward and forward; (2) the fetus' head positions downward in the pelvic cavity; and (3) the cervix softens and dilates. The factors that actually trigger the onset of labor are not known, although it is certain that the changing level of hormones do play a part in bringing about changes that prepare for birth.

Near the end of pregnancy, back pains and uterine contractions may be experienced. These could be indications of "false labor." However, there are several signs that suggest imminent labor. They are (1) regular uterine contractions of increasing intensity, frequency, and duration; (2) blood-tinged mucus known as "show" from expulsion of the cervical plug; and (3) the rupture of the amniotic membranes (bag of water) producing clear fluid from the vagina (Smart & Smart, 1977).

Labor is the work that the mother does in giving birth. The entire process of childbirth, called "parturition," takes place in three stages. The first stage of labor usually takes the longest time. This stage averages twelve hours for first babies and six to eight hours for subsequent births. During this stage the dilation of the cervix takes place with rhythmic uterine contractions. Two kinds of muscular forces work to enlarge the cervical opening. They exert about thirty pounds of pressure on the fluid surrounding the fetus. The membrane enclosing the fluid breaks, and the baby's head presses on into the opening. Muscular processes continue dilating the cervix. When the dilation is completed, the diameter is approximately eight centimeters. The strong muscular walls of the uterus push the baby downward into the birth canal. Usually, at this time the woman is taken to the delivery room (Smart & Smart, 1977).

The second stage of labor begins with the full dilation of the cervix and concludes with the expulsion of the fetus from the mother's body. Uterine contractions move the baby along the birth canal, which has been softened and made elastic (Helms & Turner, 1981). To accommodate the passage of the infant's head and shoulders, which is the largest part of the body, the opening of the vagina must stretch. To avoid tearing the tissue between the vagina and rectum, the physician may preform an episiotomy. This is a surgical slit made at right

angles to or directly toward the rectum; the incision is stitched after the birth and heals in a few days (Stone & Church, 1979). This second stage of labor may last a few minutes or a few hours, with the average time being an hour and a half for the first baby. The time is generally half as long for subsequent births (Helms & Turner, 1981).

The third stage is called "after birth." This stage involves the necessary expelling of placenta and membranes and usually occurs five to fifteen minutes after the baby is delivered (Ambron, 1981).

Although there are many possible fetal dangers associated with the birth process, the two major ones involve the breaking of the blood vessels of the brain, called "hemorrhaging," caused by strong pressure on the head of the fetus. The other danger is lack of oxygen because of the infant's failure to begin to breathe soon after separating from the maternal source of oxygen. Both of these conditions affect the supply of oxygen to the nerve cells of the brain and can lead to damaged brain cells.

When normal birth is impossible or dangerous, the baby may be delivered by Caesarean section, a procedure of surgically cutting into the mother's abdomen and uterus to remove the baby and then the placenta. A Caesarean section is much safer than a difficult forcep delivery or a breech birth through a narrowed pelvis. A breech birth is the expulsion of the baby, feet first.

In certain instances wherein the well-being of the mother and/or child is a factor, induced labor may be necessary. Induced labor is beginning labor with the help of medication.

In traditional childbirth, local and direct infiltration anesthesia is used. Other medication procedures are pudental nerve block, continuous lumbar epidural analgesia, and spinal anesthetic or saddle-block. Some women prefer no medication and participate actively in the births of their children through use of prepared and learned techniques, such as the Lamaze method of childbirth. All of these methods should be discussed with the mother's physician prior to the onset of labor and a decision reached about the use of any particular one.

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- Ambron, S. R. Child development (3rd ed.) New York: Holt, 1981.
- Helms, D. B., & Turner, J. S. Exploring child behavior (2nd Ed.) New York: Holt, 1981.
- Smart, M. S., & Smart, R. C. Children: Development and relationships (3rd Ed.) New York: Macmillan, 1977.
- Stone, L. J., & Church, J. Childhood and adolescence (4th Ed.) New York: Random House, 1979.

LEARNING ACTIVITIES

1. Title: Crossword Puzzle

Description: Complete the crossword puzzle entitled "Birth Process" (Student Handout #5).

<u>Key:</u>	<u>Across</u>	<u>Down</u>
	1. <i>Premature</i>	2. <i>Miscarriage</i>
	4. <i>Caesarean</i>	3. <i>Labor</i>
	5. <i>Afterbirth</i>	6. <i>False</i>
	6. <i>Forceps</i>	7. <i>Contractions</i>
	8. <i>Episiotomy</i>	
	9. <i>Dilation</i>	

Materials Needed: Copies of puzzle

2. Title: Question Box

Description: Establish a question box for students to leave questions they might have on the birth process. Answer the questions the next day.

Materials Needed: Question box, paper, and pen

3. Title: Guest Speaker

Description: Invite a doctor or nurse to speak to the class on the birth process.

Materials Needed: Letter confirming time and date, thank you letter

4. VOCABULARY

1. False Labor--Back pains and uterine contractions that may occur toward the end of a pregnancy.
2. Parturition--The entire birth process.
3. Episiotomy--A surgical slit which prevents tearing of tissue around the vaginal opening during the birth process.

INSTRUCTIONAL AIDS

1. Title: Transparencies

Description: Use three transparencies entitled "Birth Stages" (Figure #11a, 11b, and 11c) when discussing this subject.

Materials Needed: Materials for transparencies, overhead projector

2. Title: Bulletin Board

Description: The bulletin board on "Warning Signals of Labor" (Figure #12) can be used when discussing this topic.

Materials Needed: Background, letters, construction paper, markers

3. Title: Transparency

Description: Figures #13a and 13b can be used when discussing dilation of the cervix. Figures #14a, 14b, and 14c depict the second stage of labor, the birth of the child.

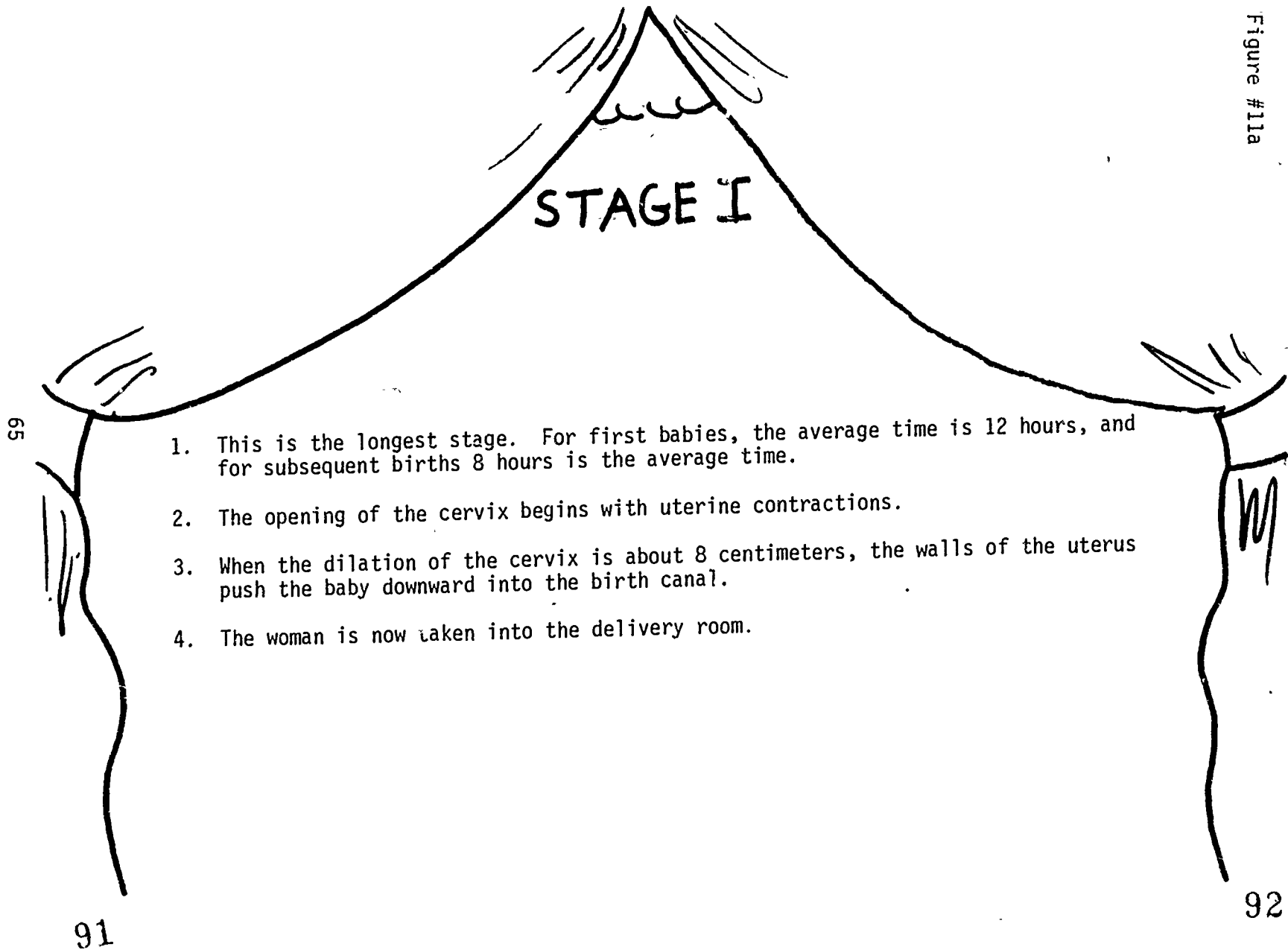
Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Matching Questions

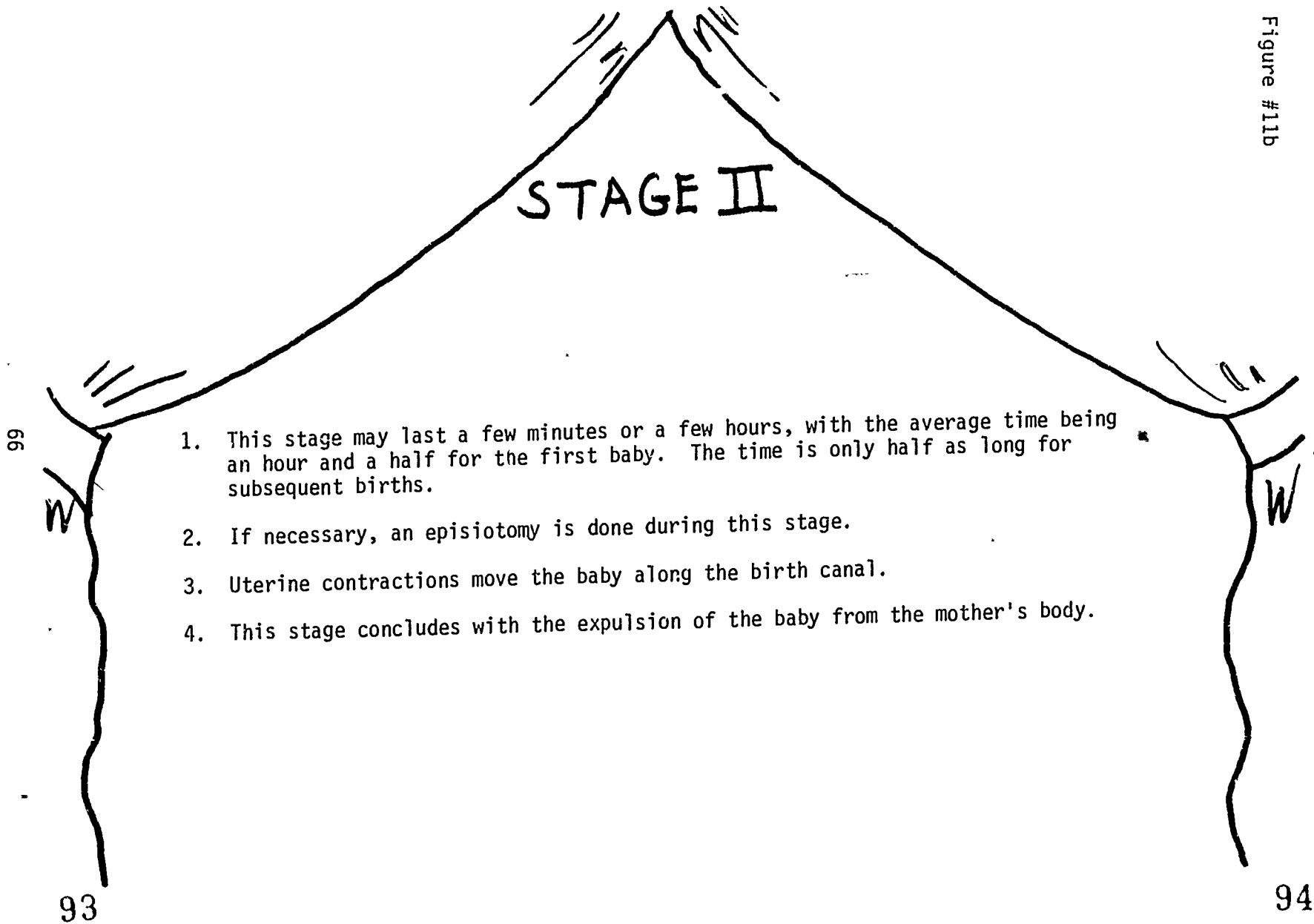
Description: These matching statements can be used as a basis for evaluating student's understanding.

- | | |
|--|--------------------------|
| <u>B</u> 1. Back pains and irregular contractions that occur toward the end of the pregnancy | A. Hormones |
| <u>D</u> 2. Stage when dilation of cervix begins | B. False Labor |
| <u>F</u> 3. Surgical slit that prevents tearing of tissue during the birth process | C. Parturition |
| <u>H</u> 4. A surgical procedure for delivering the baby | D. First Stage of Labor |
| <u>I</u> 5. Beginning labor by medication | E. Second Stage of Labor |
| <u>I</u> 6. When a child is born feet first | F. Episiotomy |
| <u>G</u> 7. Afterbirth is expelled | G. Third Stage of Labor |
| <u>F</u> 8. Full dilation and expulsion of baby | H. Caesarean Section |
| <u>C</u> 9. The entire process of birth | I. Breech Birth |
| <u>A</u> 10. Changing levels are a factor in bringing on labor | J. Induced Labor |



1. This is the longest stage. For first babies, the average time is 12 hours, and for subsequent births 8 hours is the average time.
2. The opening of the cervix begins with uterine contractions.
3. When the dilation of the cervix is about 8 centimeters, the walls of the uterus push the baby downward into the birth canal.
4. The woman is now taken into the delivery room.

Figure #11b



1. This stage may last a few minutes or a few hours, with the average time being an hour and a half for the first baby. The time is only half as long for subsequent births.
2. If necessary, an episiotomy is done during this stage.
3. Uterine contractions move the baby along the birth canal.
4. This stage concludes with the expulsion of the baby from the mother's body.

Figure #11c



STAGE III

1. This stage is called "after birth" and involves the necessary expelling of the placenta and membranes.
2. This stage usually occurs five to fifteen minutes after the baby is delivered and continues for about an hour.

67

Figure #12

WARNING SIGNALS

OF LABOR

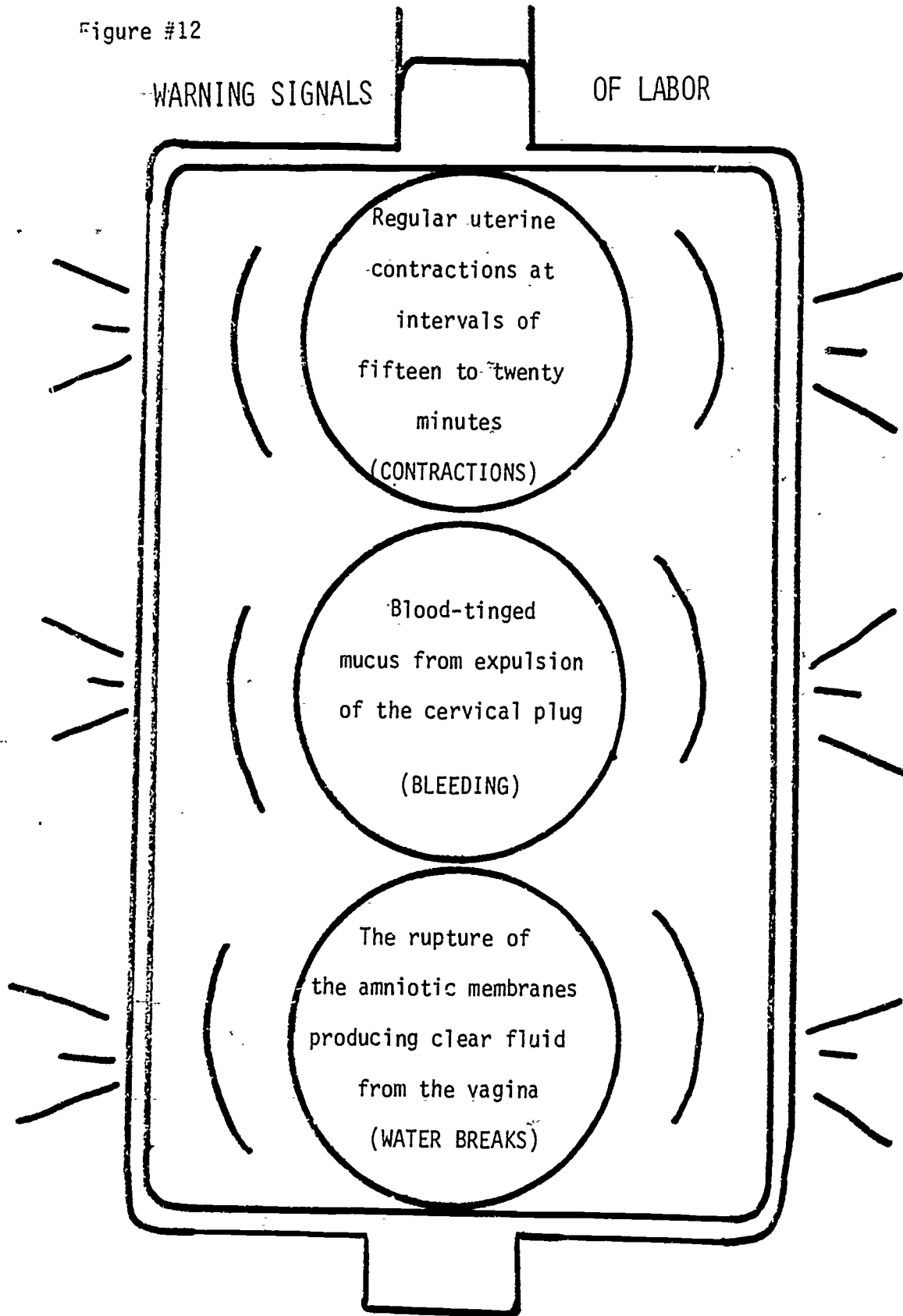
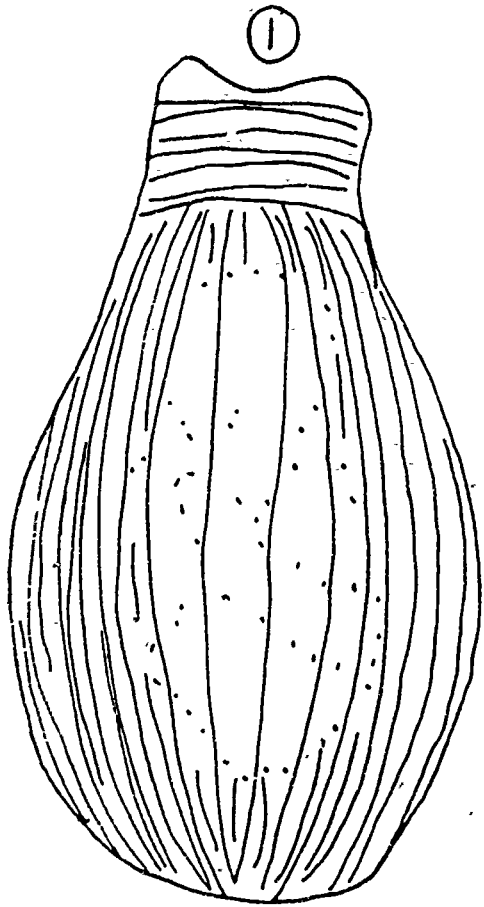


Figure #13a

DILATION OF THE CERVIX

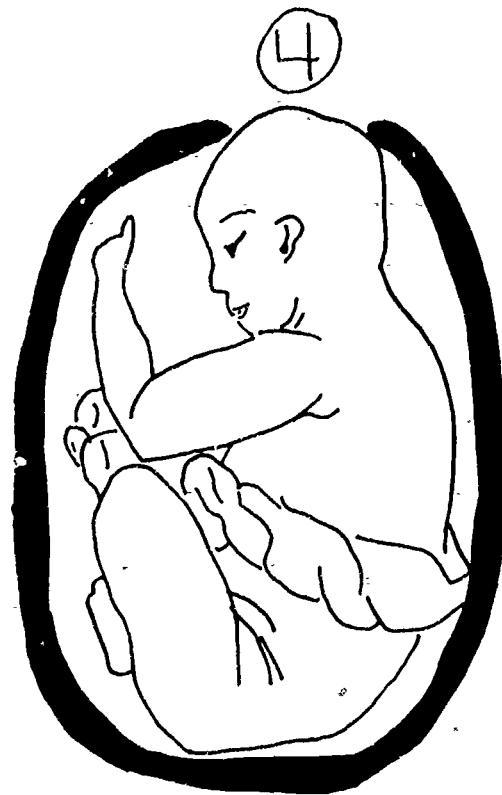


69

98

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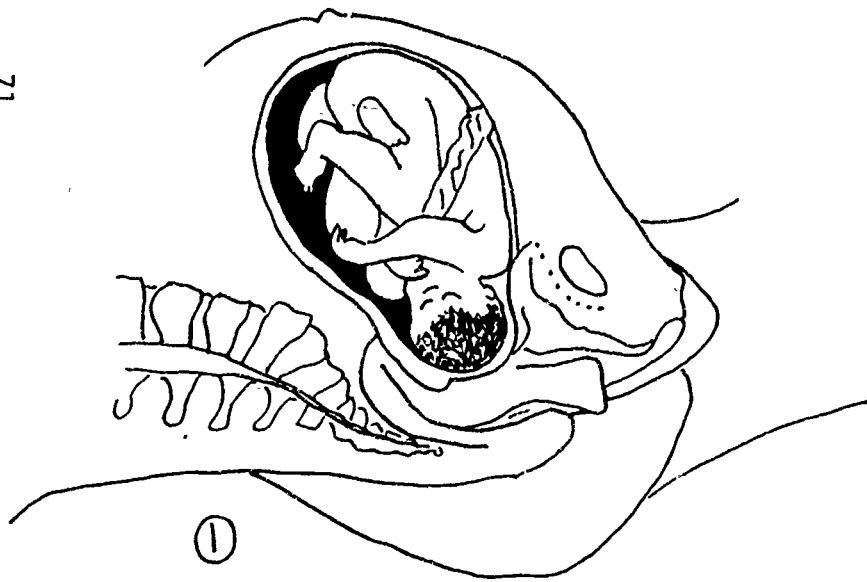
DILATION OF THE CERVIX



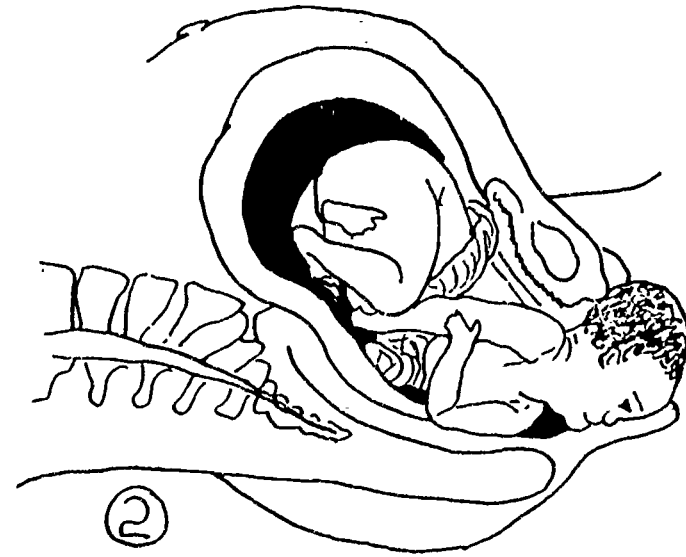
70

SECOND STAGE OF LABOR

71



102



103

Figure #14b

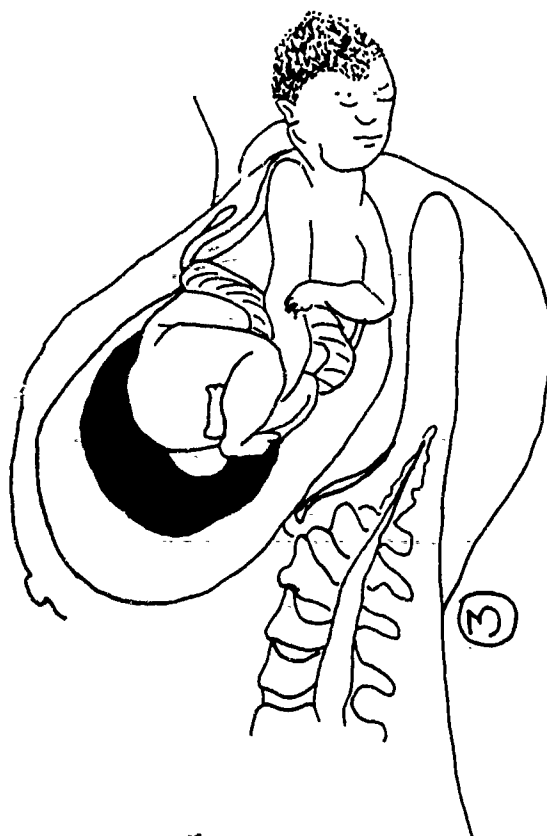
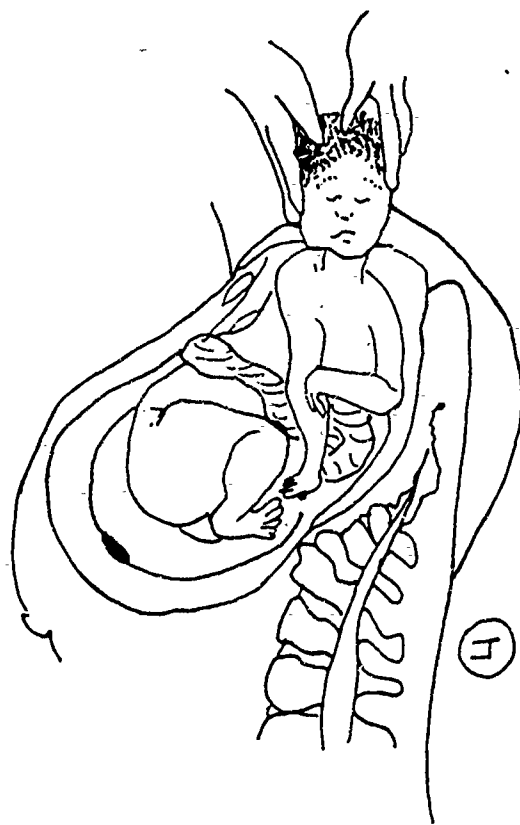
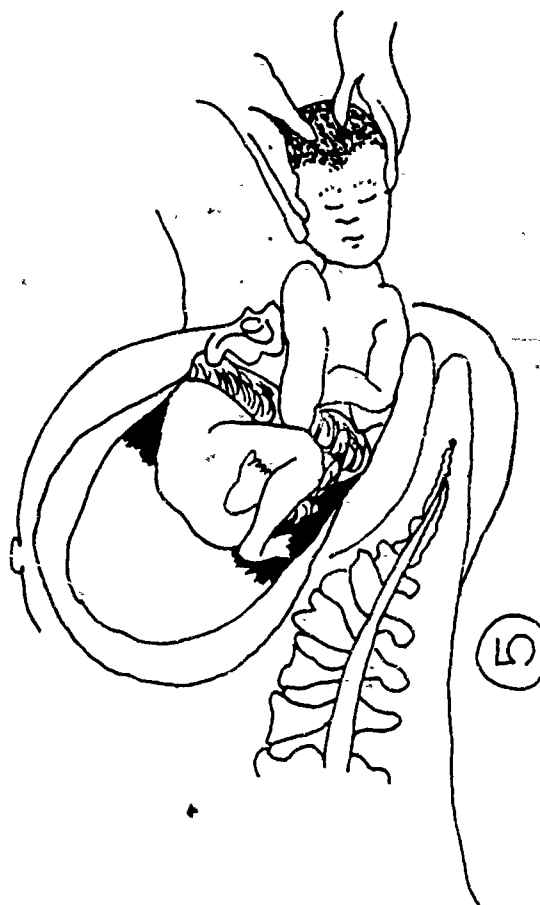
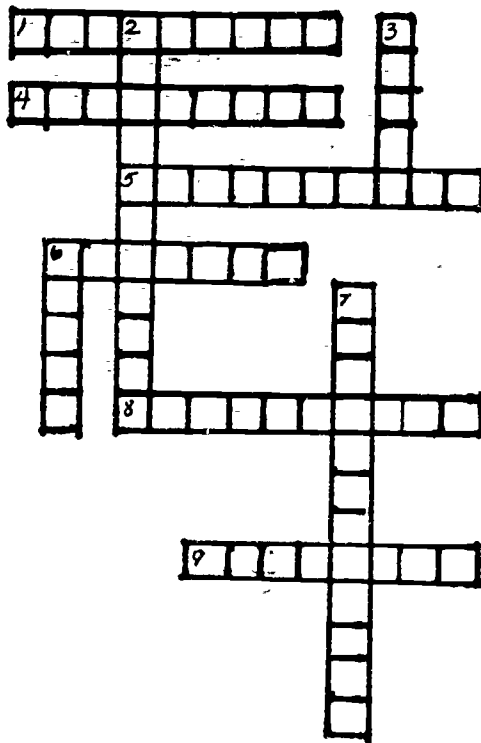


Figure #14c



Birth Process Crossword Puzzle
Student Handout #5



Across

3. A _____ baby is born before the full term of nine months is over.
4. Delivering a baby by a surgical procedure.
5. Expelled about ten minutes after the baby is born.
6. An instrument that doctors use to help in the birth process.
8. Surgical incision to aid in the birth process.
9. Opening of the cervix.

Down

2. When the fetus is born too early to survive.
3. Contractions are an indication that _____ has begun.
6. _____ labor is experienced by many women during the last month of pregnancy.
7. Sharp pains at regular intervals.

UNIT: Prenatal Development

CONCEPT: Birth Defects

GENERALIZATIONS

1. Prenatal care of the mother influences the physical development of the fetus.
2. During the early stage of prenatal development, the baby is subjected to greater danger from environmental factors that cause birth defects.
3. Methods of detection and prevention have aided in reducing the number of birth defects.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Classify birth defects according to the category and cause.
2. List some high-risk conditions in pregnancy.
3. Discuss methods of detecting birth defects.
4. Discuss preventive measures for birth defects.

OUTLINE

- I. Birth Defects
 - A. Definition and Causes
 - B. High-risk Factors in Pregnancy
 - C. Causes of Birth Defects
- II. Methods of Detection
- III. Preventive Measures

REVIEW OF SELECTED LITERATURE

Birth defects are abnormal conditions present at birth and may be a disorder of the body structure, function, or chemistry. Some birth defects are visible, although others may not be detected for years.

Various studies reveal that of the more than three million babies born during the year seven percent (250,000) will come into the world with some type of birth defect. Another 500,000 fetuses will be aborted or stillborn (National March of Dimes cited by Papalia, 1975). Of the approximately 1,600 known kinds of birth defects, most are extremely rare.

Environmental factors that can cause birth defects are drugs, infections, radiation, malnutrition, poor prenatal care, chromosomal abnormalities, and metabolic defects. Heredity or the interaction of genetic and environmental factors can also cause some birth defects.

High risk pregnancies are those in which the mother is over thirty-five years old and having her first child, or when the mother is under twenty years of age. Women with diabetes or chronic disease of the heart, lungs, liver, kidneys, or metabolic disorders or those who have a history of family genetic disease are also included in the high-risk category (Koch & Koch, 1976). During the first three months of pregnancy, the developing embryo is most susceptible to factors that cause defects. Unfortunately, during the first weeks of this crucial period, many women do not know that they are pregnant and consequently may not take care of themselves as they should. Lacking an understanding of the importance of prenatal influences causes many women to be unconcerned about the dangers involved. One out of four women who gives birth in public hospitals has never seen a physician during her pregnancy. In rural and depressed areas, the number is higher (Koch & Koch, 1976).

Large numbers of defects can be attributed to maternal malnutrition, and the problem is not restricted to mothers belonging to poverty groups. The expectant mother who has only coffee and toast for breakfast and a sandwich for lunch is not getting the proper nutrients for herself or the baby. Poor nutrition can lead to low birth weight, high susceptibility to illness, and retarded development of the baby's body.

Drugs of all types have been studied to determine their effects on prenatal development. The most tragic case in recent years was that of the thalidomide babies born in the late 50's and 60's. The resulting deformities occurred when the mothers took the seemingly harmless tranquilizer, thalidomide, during the first few weeks of pregnancy. It was a mutagen (capable of causing defects) which arrested the unborn child's arms or legs in the flipper stage of development.

Other common drugs can cause damage. Antibiotics like streptomycin and tetracycline, the sulfanilamide, and certain barbiturates and antinausea drugs can cause damage to the developing embryo. Even common aspirin and excessive amounts of vitamins A, B₆, C, and K can cause defects. The best advice is to avoid all drugs during this period.

Smoking is also very detrimental to the developing embryo. Mothers who smoke have more miscarriages, more stillbirths, and more babies who die shortly after birth. Their babies also tend to be smaller at birth as a result of the continued oxygen deprivation caused by the intake of

carbon monoxide and nicotine. Physiologically, when the mother is smoking, there is an increase in the fetal heartbeat and contractions of the uterine and placental blood vessels, which reduce the fetal oxygen and food supply.

Excessive use of alcohol during pregnancy can result in the Fetal Alcohol Syndrome. The FAS causes retardation in growth, subnormal intelligence, lagging motor development, and many physical defects. Addictive drugs, if taken by the mother, will produce defects similar to those caused by the Fetal Alcohol Syndrome. In addition, infants born to mothers who are addicted are themselves addicted and must go through withdrawal symptoms. Recent studies have even linked some birth defects to drug use by the father. Drug use by the father can have damaging effects on the chromosomes in his sperm cells, thereby creating defects he can then pass on to his children.

Another cause of birth defects is maternal illness. When a pregnant woman suffers from some serious illness early in her pregnancy, the effects therefrom could cause damage to the infant. One example of this is Rubella or German Measles. When a pregnant woman contracts Rubella early in her pregnancy, the child may be born with mental retardation, vision and hearing defects, and heart defects. Consequently, it is important for a pregnant woman to be very careful and not expose herself to any potentially harmful disease.

A major cause of birth defects is genetically related. Erythroblastosis (Rh disease) is a genetic defect and is one of the most common that occurs in newborns. The Rh blood factor is found in the red blood cells of eighty-five percent of the population. Individuals having this Rh factor are said to be Rh positive. Those lacking the substance are said to be Rh negative (Berrill, cited by Smart, 1977).

If an Rh negative mother conceives a child who has inherited Rh positive blood from the father, complications occur. This Rh factor in the fetal blood can cross the placental membrane. Once the factor enters the mother's bloodstream a defensive mechanism is triggered; her body begins to produce antibodies which can go back across the placental membrane to destroy the infant's blood. There are usually no problems during first pregnancies, but during subsequent pregnancies, the concentration of these antibodies can increase to the point that they will destroy or damage the blood cells of the fetus. Many fetuses suffering from Rh disease can now be saved by transfusions given before and after birth (Koch & Koch, 1976). Shortly after delivery, an injection of gamma globulin (Rh₀ immune globulin) is routinely administered to the Rh negative mother who gives birth to an Rh positive infant. This injection prevents the antibodies from forming and decreases the possibility of birth defects from Rh incompatibility in future pregnancies.

There are approximately 1600 known defects that can be inherited. Many are known as "inborn errors of metabolism," meaning they are the result of some genetically caused defect. These defects are a result of conditions in which the body cells either cannot make or dispose of some chemical (Ames, 1979). Galactosemia is a defect resulting from the

body's inability to metabolize the milk sugar, galactose. Phenylketonuria (PKU) is an enzyme disorder in which the body cannot use the amino acid phenylalanine, found in all foods that contain protein. Unless the condition is discovered early and treated by a rigid diet, brain damage occurs. Approximately one in 100 patients in public institutions for the mentally retarded are victims of PKU (Schild, 1972). Many state laws require hospitals to administer blood tests to all newborns to check for this metabolic disorder.

Tay-Sachs disease, a metabolic disorder in which the body is unable to metabolize fats in the nervous systems, is most frequent among Jews with ancestors from Central and Eastern Europe. Blood tests will reveal carriers of this disease, which affects brain cells and causes loss of motor abilities, followed by deafness and blindness.

Some miscarriages are believed to be related to chromosomal abnormalities (Ames, 1979). Down's syndrome, formerly called mongolism, is caused by a chromosomal defect in which there is an extra chromosome in the affected child's cells. The chance of this defect happening increases with the age of the mother. In the age group twenty to thirty years, the chances are one in one thousand; in women thirty-five and older, there is one chance in forty-five (Ames, 1979). One in every ten patients in institutions for the mentally retarded in the United States has Down's syndrome (Koch & Koch, 1976).

There are types of defects that are more common to a particular race. People in southern Europe often carry a gene for the blood disease Thalassemia (Ames, 1979). Cystic fibrosis, a functional defect affecting the respiratory and digestive system, is most often found in people of European background. Another example is sickle cell anemia, which affects one in ten black Americans. This disease, for which there is no cure, can be passed from one generation to another. Blood tests can be used to determine the presence of this genetic disorder. Genetic counseling can help carriers make decisions concerning parenthood.

Defects such as congenital heart malformation, clubfoot, spina bifida, and cleft lip and/or cleft palate may be the result of hereditary and environmental factors. Craniosynostosis is a type of defect in which there is no "soft spot" at the top of the baby's head and the child is mentally defective because the brain has no room to grow (Koch & Koch, 1976). Long and difficult births may cause bleeding in the lining of the brain of the newborn child, who, unless treated, will suffer a type of brain damage. (Koch & Koch, 1976).

Methods of detecting and preventing birth defects are used widely throughout the United States. In a process called amniocentesis, a small amount of amniotic fluid is removed by inserting a narrow needle through the mother's abdominal and uterine walls and into the amniotic sac. This fluid contains cells from the fetus. Over 200 genetic diseases can be prenatally diagnosed by tests on the fluid and its cells. This figure, however, is constantly increasing. The sex of the fetus can also be determined. This fact is important to the family known to have sex-linked defects, such as hemophilia (Smart, 1977).

Another diagnostic technique uses an instrument known as an "amino-scope" to light and view the inside of the uterus from the birth canal. In amniography, the amniotic fluid is injected with a dye that the fetus swallows. An x-ray will then reveal whether certain soft tissues are growing properly.

A fetoscope is most commonly used in the absence of a measurable heartbeat to determine whether the baby is alive. Movement is detected by looking through the pencil-sized scope (Keister, 1977). With ultrasonography, high frequency sound waves are used to give an outline of the fetus on a screen. Harmless sound waves pass through the mother's abdomen, revealing the position of the fetus and any defect in shape. This method of detection is much safer than x-ray.

Techniques for diagnosing and treating fetal conditions involve risks to both the mother and fetus. They are not to be used without careful consideration. Genetic clinics provide information and counseling for couples who may carry genes for hereditary defects. Genetic counseling centers are available in most metropolitan areas.

The National Foundation March of Dimes, Tufts-New England Medical Center, and Massachusetts Institute of Technology have developed a world-wide computer system to provide physicians with diagnostic information. With the aid of a computer connected to the telephone system, twenty-four hour service for information, diagnosis, and treatment is provided. Education, genetic counseling, and the awareness of good prenatal care principles can help to further reduce the number of birth defects.

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- Koch, R., & Koch, J. H. We can do more to prevent the tragedy of retarded children. Psychology Today, 1976, 88.
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- Schild, S. Parents of children with PKU. Children Today, 1972, 1, 22.
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SUGGESTED READINGS

Ames, L. B. Child care and development. New York: J. B. Lippincott, 1979.

Excellent text for high school. Chapter on special problems--information on defects as related to careers.

National Foundation/March of Dimes, Birth Defects: The tragedy and the hope. White Plains, N. Y.: The Foundation, 1975.

One of several publications available on birth defects.

Nilsson, L., Ingleman-Sundberg, A., & Wirsen, C. A child is born. New York: Dell Publishing, 1965.

Illustrated with photographs of human embryo. Content includes information pertinent to all areas of prenatal development and is written in terms easy for expectant parents or students to understand.

Prenatal care, U. S. Department of Health, Education and Welfare, Office of Child Development, Children's Bureau. Publication number 4, 1962.

Written for the expectant parent--excellent reference for students.

Walters, J. Birth defects and adolescent pregnancies. Journal of Home Economics, 1975, 67, 23-27.

Provides a summary chart that is very helpful.

LEARNING ACTIVITIES

1. Title: Written and Oral Reports

Description: Select a birth defect to research. Compile findings and present information in a written report and an oral summary to the class.

Materials Needed: Library

Source: March of Dimes, Box 2000, White Plains, NY 10602

2. Title: Colloquim

Description: A colloquim consist of two panels. There will be three members on each panel. One panel will consist of three guest panelists, knowledgeable on birth defects, and the other will consist of students from the classroom. In preparation for this activity, the class, at a previous class period, could prepare a list of questions for the student panelists to ask.

Materials Needed: None

Resource People: March of Dimes, American Heart Association, Supervisor of Nursing, School Nurse, Pediatrician, General Practitioner.

3. VOCABULARY

1. Birth defects--Abnormal conditions present at birth, although all birth defects are not visible at birth.

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: After observing the bulletin board "Investigate Birth Defects" (Figure #15), the student will be able to classify birth defects according to category and cause.

Materials Needed: Bulletin board paper, colored paper, felt pens, stapler/staples

2. Title: Tragedies of Birth Defects Films

Description: Films related to this topic may be obtained from St. Jude's Hospital or one's local March of Dimes.

Materials Needed: Film projector, film

Sources: March of Dimes, Box 2000, White Plains, NY 10602; St. Jude's Hospital, Memphis, Tenn.

3. Title: Transparency

Description: Use a transparency on "High-Risk Conditions in Pregnancy" (Figure #16), when discussing this topic.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Matching Test

Description: Classify birth defects according to category and cause. (For the following evaluation exercise, match the diseases listed in Column A with the categories of possible causes in Column B.)

COLUMN A

1. D Down's Syndrome

COLUMN B

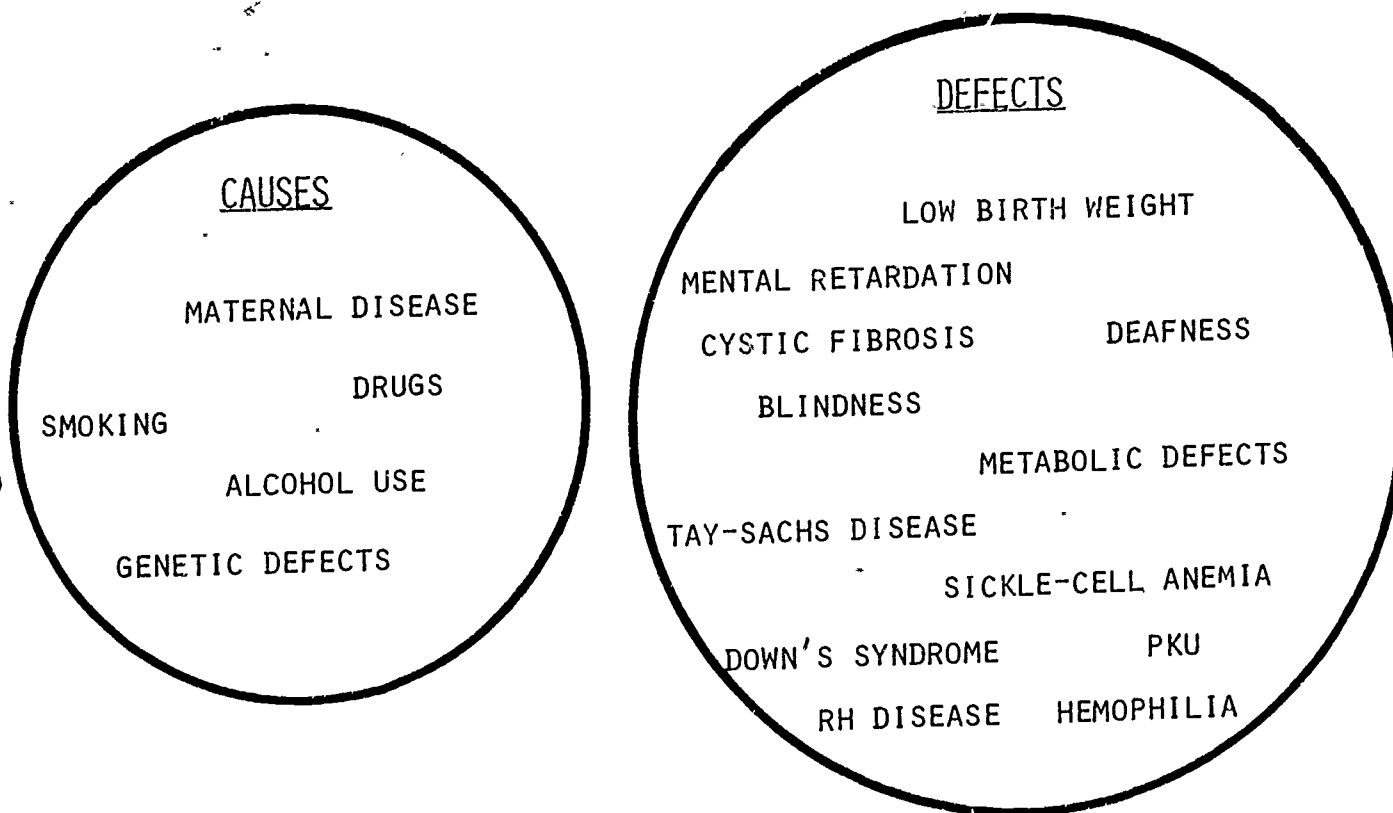
- A. Communicable diseases

- | | |
|--------------------------------|-------------------------|
| 2. <u>C</u> Sickle Cell Anemia | B. Errors of metabolism |
| 3. <u>B</u> PKU | C. Genetic diseases |
| 4. <u>A</u> German Measles | D. Chromosomal errors |
| 5. <u>E</u> Thalidomide | E. Toxic agents |
| 6. <u>C</u> Rh factor | |
| 7. <u>B</u> Tay-Sachs Disease | |
| 8. <u>E</u> Nicotine | |
| 9. <u>A</u> Rubella | |
| 10. <u>E</u> Alcohol | |

Materials Needed: Copies of matching test

INVESTIGATE BIRTH DEFECTS

Figure #15



HIGH RISK CONDITIONS IN PREGNANCY



84

AGE

HEALTH

GENETICS

PRENATAL CARE

117

118

UNIT: Prenatal Development

CONCEPT: Postpartum Care of Mother

GENERALIZATIONS

1. Postpartum begins at childbirth and ends when the reproductive organs have returned to normal.
2. Women who have just gone through pregnancy often find themselves victims of emotional cycles.
3. The first hour after delivery is a very critical period and is sometimes referred to as the fourth stage of labor.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define "postpartum."
2. Identify the physiological changes that occur in the mother during postpartum.
3. Discuss the physiological changes in the mother's body.
4. Name the causes of postpartum depression.
5. Explain why the first hour after delivery is a very critical period.

OUTLINE

- I. Definition of Terms
- II. Immediate Postpartum Care
 - A. Uterine Contraction
 - B. Perineal Care
 - C. Routine Physical Care
 - D. Returning Home

III. Physiological Changes

- A. Cervix and Vagina
- B. Endometrium
- C. Bladder
- D. Abdominal Wall
- E. Uterus
- F. Breasts
- G. Weight Loss
- H. Return of Menstruation

IV. Emotional Changes

- A. Causes
- B. Postpartum Blues

V. Medical Examination

REVIEW OF SELECTED LITERATURE

The anatomical and physiological changes that take place in the body throughout pregnancy do not return to normal at the moment of delivery, or even within seven or ten days. It takes several days or weeks for some functions of the body to return to normal. The word "puerperium" means the period after labor. It is sometimes called the "postpartum" (Latin, "after delivery") or "puerperal period" (Bookmiller, Bowen, & Carpenter, 1967). It begins with completion of the third stage of labor and ends when the reproductive organs have returned to normal, or nearly so. This process usually takes about six weeks (Bookmiller et al., 1967).

The first hour after delivery is a very critical period and is sometimes referred to as the fourth stage of labor. The uterus may continue to contract and relax, rather than remain firmly contracted. When the uterus is firmly contracted, the open blood vessels and sinuses at the placental site are compressed. The uterus has to remain firm and contracted continuously to control bleeding (Broadribb & Corliss, 1973):

The mother should be watched carefully for the first twelve to twenty-four hours following delivery. This period is the most likely time for a postpartum hemorrhage to occur (Broadribb & Corliss, 1973).

After delivery of the baby, the perineal area of the mother needs special attention. Washing with warm water reduces odor. It is a cleansing rather than a sterile procedure. The perineal area should be cleansed each time after the mother urinates or defecates (Broadribb & Corliss, 1973).

The mother should wash her hands before and after perineal care. In order to control the vaginal discharge following delivery, she should remove and replace her pads always from front to back to prevent bringing organisms around the rectal area forward to the birth canal (Broadribb and Corliss, 1973).

There is a certain amount of physical care a mother must have: (1) her pulse, temperature, and respiration should be taken once in the morning and the afternoon, and blood pressure should be checked once a day; (2) walking soon after delivery has several advantages, such as helping the mother get her strength back more quickly so to feel better and stronger; circulation is improved, resulting in fewer complications with thrombophlebitis; bowel and bladder complications are lessened, resulting in fewer catheterizations; the mother also has less abdominal distension and constipation; (3) the mother needs an abundance of sleep and rest; (4) good nutrition promotes a rapid recovery, helps the mother resist infections, and improves the quality and quantity of breast milk (Broadribb & Corliss, 1973).

If the mother experiences discomfort in the perineum, there are several measures to relieve this pain: (1) perineal lamp--used to provide dry heat to the area; (2) Sitz baths--a bath ordered by the physician which is given two or three times daily to increase circulation to the perineum; (3) topical sprays that contain a local anesthetic; (4) ice bags; (5) perineal exercise; (6) analgesic medication, such as codeine (Broadribb & Corliss, 1973). Other discomforts that the mother might experience are constipation, afterbirth pains (caused by uterus contracting), hemorrhoids, and engorgement.

Three to five days is a normal hospital stay following birth. Upon leaving the hospital, the mother will be instructed by her physician on continued perineal care, breast care, exercise, rest, possible diet, and return to normal activities. The instructions should be followed carefully.

Other physiological changes that occur in the mother during the postpartum period are numerous. Each day the uterus, which is at the level of the umbilicus immediately after delivery, gradually becomes smaller and descends toward the pelvic cavity. The rapid shrinkage of the uterus is called "involution." Total involution takes about two months, although the vast majority of the change will occur in the first two weeks (Broadribb & Corliss, 1973). Within a week to ten days, the inner surface of the uterus, except for the placental site, regenerates its lining. The placental site requires about six weeks to disappear.

Immediately following delivery, the cervix is soft and flabby. If there are any lacerations, they will heal rapidly. The cervix remains slightly open, even after involution of the uterus is complete, and never reverts to its pre-pregnant state (Broadribb & Corliss, 1973).

The vagina recovers slowly from serving as the birth canal, and the vaginal opening may remain larger than its pre-pregnant state. There is a normal vaginal discharge following birth, which diminishes in amount in the early postpartum period. It is called "Lochia." Lochia may persist for two to four weeks and goes through three color changes, from redish or pinkish-red, to brownish, to whitish or yellowish.

The bladder has an increased capacity and is less sensitive to fullness than normal, frequently causing overdistension of the bladder. Another problem is incomplete emptying of the bladder, causing residual urine. This is one reason for an increased incidence of urinary and bladder infection among postpartum patients. Some mothers have difficulty in voiding following delivery. This problem is a result of labor itself, which caused the tone of the bladder to be temporarily impaired.

The abdominal wall tends to be soft and flabby after delivery because it was very extended during pregnancy. Some women may even look pregnant after delivery. The mother will tend to look this way until the muscles regain their tone. Muscle toning can be aided with simple exercises recommended by her doctor.

The breasts are very soft during the first two postpartum days. Unless the mother receives a hormone shot prior to delivery, the breasts begin secreting a yellow fluid called "colostrum," which is manufactured by the body during these two days. The colostrum is rich in amino acids and provides antibody protection for the infant. On the third to fifth days following delivery, the breasts become engorged (firm and full). Engorgement is brought about by the hormone prolactin, which is stimulated by the baby's sucking at the breasts. When milk comes in, the breasts often become painful for several days. As the baby sucks off the milk, the breasts soften and become less tender, only to refill and again become firm.

At the time of delivery and during the first two or three days immediately afterward, a woman automatically loses a certain amount of weight. This amount is usually about fourteen pounds, consisting of baby (seven pounds), placenta (one and a half pounds), fluid (two and a half pounds), and extra circulating blood volume (three pounds). If the mother does not breast feed her baby, she will lose an additional two pounds as the breasts gradually return to their normal size. Two more pounds are lost as the uterus gradually involutes during the first two weeks following delivery.

Women who do not breast feed their babies begin to menstruate again in six to eight weeks. Return of menstruation is less predictable for women who breast feed, and it may return anytime from

six weeks to as late as six to eight months or longer following delivery. The first period is usually profuse and prolonged.

Women who have just gone through pregnancy often find themselves victims of emotional cycles. This period is often marked by depression, anxiety, anger or feelings of abandonment. After delivery, the high pregnancy levels of estrogen and progesterone drop rapidly, affecting endocrine changes which can influence the mother's mood (Smart & Smart, 1977).

Pregnancy, childbirth, and the care and feeding of a newborn infant are very costly in terms of energy. For some, the emotional charge substantially offsets the physical and emotional drain. Increased attention from husband, relatives, and friends can provide additional compensation. Even in the best of circumstances, this time is likely to be experienced as an energy crisis, and sound planning is needed to maintain a positive balance. Psychologists have speculated that one of the factors contributing to postpartum depression may be the abrupt end of the drama and the immediate return of everyday chores (Leslie & Leslie, 1977).

Research findings suggest that a model for explaining and predicting postpartum adjustment must include four major components: (1) the woman's personal vulnerability to stress; (2) immediate environmental conditions; (3) relations with significant others; and (4) biochemical changes (Bookmiller et al., 1967; Broadribb & Corliss, 1973).

Further evidence suggests that postpartum adjustment has important determinants other than the physiological. The following "signals" in the background of women with adverse reactions were found: (1) family home broken by death or other separation; (2) previous emotional disorder in self; (3) living with parents or other immediate family; (4) physical illness or complication of pregnancy; (5) recent move; (6) unplanned pregnancy; (7) acute strains during pregnancy, such as husband away or no outside help in the household (Bookmiller et al., 1967; Broadribb & Corliss, 1973).

Emotional and personal adjustments follow childbirth. The mother is confronted with the reality of the baby--the irrevocable fact that the baby is here to stay and that the ensuing demands must be met at whatever cost to her own needs and time. Especially with a first baby, the mother's life-style changes drastically because of the total dependency of the infant, whose needs now come before her own, a state which can provoke anxiety, approaching panic in new mothers. It becomes clear to her that her life will never again be the same. Under the best circumstances, with a sharing mate and helping friends and relatives, the postpartum period makes adaptive demands many women find difficult to meet (Smart & Smart, 1977).

Reactions of women in the postpartum period cover a wide spectrum, from transient and mild to lasting and severe. The experience of any given woman is the combination of a number of factors: origins in her self, her immediate experience, and the cultural milieu. "Baby blues," with mild depression, tearfulness or crying spells, and irritability are

common and usually pass in a few weeks. Feelings commonly reported by postpartum women include the inability to concentrate, fantasies of running away, anger toward baby and husband, helplessness, inability to cope, and lethargy and fatigue.

The incidence of puerperal psychosis and serious postpartum depression is declining. In the modern era most women who carry a baby to term do so because they really want a baby; only a few feel trapped with responsibilities for which they have no wish and may be very ill-prepared. With modern educational programs, women are far better able to anticipate and to deal with the problems presented by the care of a new baby. Rooming-in and modified rooming-in programs have been of immense help in preparing the new mother for the transition from hospital to home.

At the end of the six-week period following delivery, the mother should have a medical examination. At this time the physician will check to see that the mother's body has returned properly to its pre-pregnant state. It is also at this time that the doctor can be consulted about birth control and spacing of future children.

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- Bookmiller, M. M., Bowen, G. L., & Carpenter, D. Textbook of obstetrics and obstetric nursing. Philadelphia: Saunders, 1967.
- Broadribb, V., & Corliss, C. Maternal-Child nursing. Philadelphia: Lippincott, 1973.
- Leslie, G. R., & Leslie, E. M. Marriage in a changing world. New York: John Wiley & Sons, 1977.
- Smart, M. S., & Smart, R. C. Children: Development and relationships (3rd ed.) New York: Macmillan, 1977.

LEARNING ACTIVITIES

1. Title: Exercise Activity

Description: Invite a nurse, physical therapist, physical education teacher, or dance instructor to demonstrate and explain the purpose of postpartum exercises. Participate in these exercises.

Materials Needed: Letter confirming time and date, thank you letter, exercise mats

2. Title: Report

Description: Write a report on "Postpartum Recovery." Include information on changes in uterus, amount of rest needed, diet, bathing, marital relations, menstruation, exercise, etc.

Materials Needed: Paper, pen, copies of following reference, other reference materials

Source: Childrens Bureau Publication No. 4 "Prenatal Care." U.S. Department of Education, Office of Child Development, Washington, D.C. 20402. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for \$0.20.

3. Title: Word Search

Description: Complete the word search entitled "Postpartum Care of the Mother" (Student Handout #6).

Key: Word Search

c'y i n v o l u t i o n t l e	1. postpartum
o p t r a i n t l e p p a r o	2. hemorrhage
n u o o b i n d l e m y v c c	3. rest
s i n s h e m o i r h a g e h	4. nutrition
t i l t t y b m e q u i t e i	5. constipation
i f i v e p a j s v m o o d a	6. five
p a r t u k a n t c y n d e e	7. involution
a b o u y l o r e v m i n d s	8. lochia
t o n s l w n u t r i t i o n	9. colostrum
i t t b c o l u m u a s e r y	10. mood
o n l y c z y x l k m o r e a	
n o t c o l o s t r u m z l g	

Materials Needed: Copies of word search

4. VOCABULARY

1. Postpartum--The period of time after labor.
2. Perineal Area--The region around the genital organs and rectum.
3. Involution--The rapid shrinkage of the uterus.

INSTRUCTIONAL AIDS

1. Title: Fact Sheet

Description: The following statements could be used as a basis for a fact sheet.

Postpartum Occurrences

1. Immediately after birth
 - Cervix slightly open, loses 8-12 pounds

2. First two postpartum days
 - Breasts very soft
 - Colostrum begins to secrete
3. Third to the fifth day
 - Breasts become engorged (firm and full)
4. Tenth day
 - Shrinkage of the uterus, called "involution"
 - Uterus regenerates its lining
5. Two to four weeks
 - Vaginal discharge
6. Menstruation
 - Women who do not breast feed their babies may begin to menstruate in 6-8 weeks
 - Women who do breast feed their babies may begin as late as 4-5 months after delivery

Materials Needed: Copies of fact sheet

2. Title: Signpost

Description: Construct a sign with suggestions for a good road to recovery and title it "Guidepost to Recovery" (Figure #17).

Materials Needed: Cardboard tube from a roll of wrapping paper, brick for the base, construction paper, markers

EVALUATION

1. Title: Discussion

Description: Discuss the following questions:

1. How may the mother feel mentally and physically for six weeks after the birth of the baby?

For six weeks after delivery, a new mother may feel mentally and physically drained.

2. What physical adjustments are necessary during this period?

The new mother needs to exercise to help the uterus return to normal and to be conscious of perineal care.

3. What may be some of the emotional feelings reported by new mothers?

Feelings commonly reported by new mothers include the inability to concentrate, fantasies of running away, anger toward baby and husband, helplessness, inability to cope, lethargy and fatigue, and the abrupt end of the drama and the immediate return to everyday chores.

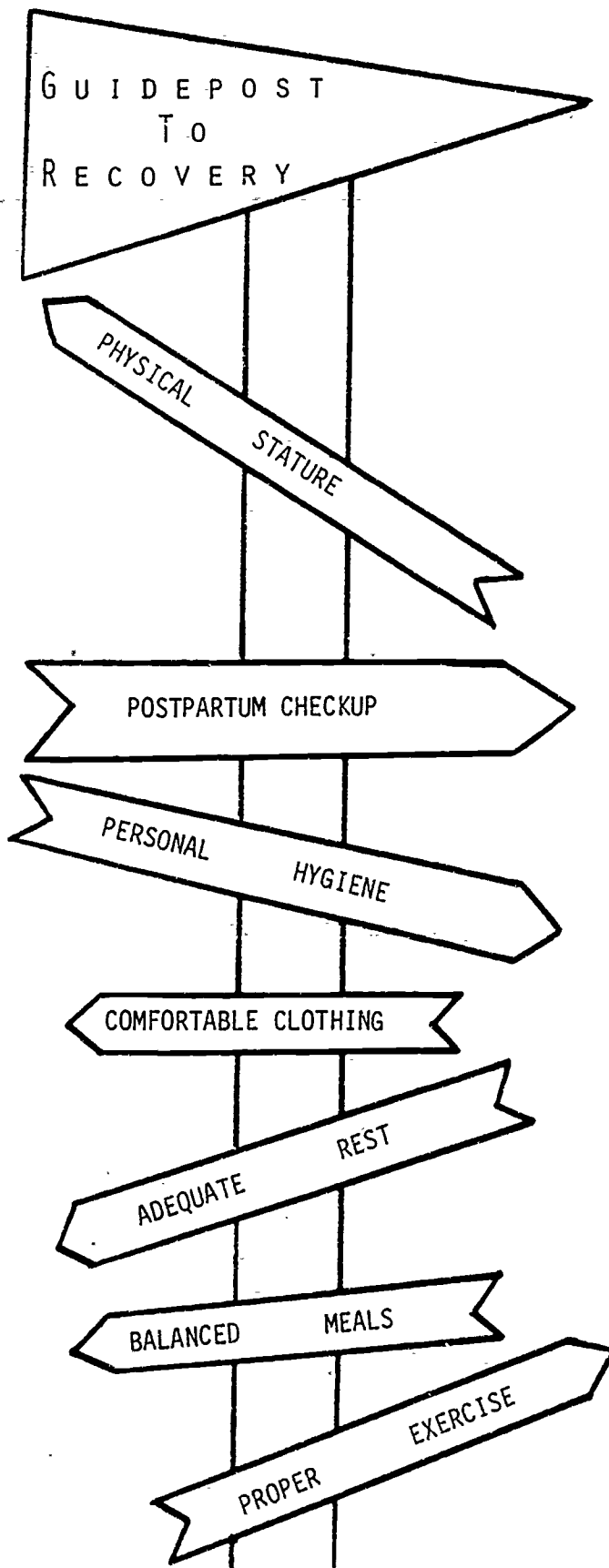
Materials Needed: None

2. Title: Chart

Description: Construct a calendar or chart noting physical changes that occur during postpartum.

Materials Needed: Paper, pen

Figure #17



Postpartum Care of the Mother - Word Search
Student Handout #6

The answers to the questions below are in the word search. Find them and write in the correct blanks. The words are vertical, horizontal, and diagonal.

CYINVOLUTIONTLL
OPTRAINTLEPPARO
NUOOBINDLEMYVCC
SINSHEMORRHAGEH
TILTTYBMEQUITEI
IFIVEPAJSVMO.ODA
PARTUKANTCYNDEE
ABOUYLOREVMINDS
TONSLWNUTRITION
ITTBCOLUMUASERY
ONLYCZYXLKMOREA
NOTCOLOSTRUMZLG

1. The period of time after labor is _____.
2. The patient should be watched carefully for the first twelve to twenty-four hours following delivery because this is the most likely time for postpartum _____ to occur.
3. A new mother needs plenty of sleep and _____.
4. Good _____ promotes rapid recovery.
5. Discomforts that the new mother may experience include _____, afterbirth pains, and hemorrhoids.
6. The normal hospital stay is three to _____ days.
7. _____ is the rapid shrinkage of the uterus.
8. _____ is a normal vaginal discharge that follows delivery.
9. _____ is a yellow fluid that the breasts secrete during the first two postpartum days.
10. After delivery the high levels of estrogen and progesterone drop rapidly which can influence the mother's _____.

UNIT LEARNING ACTIVITIES (Prenatal Development)

1. Title: Bingo

Description: The general play of the game is very similar to regular Bingo. Shuffle the clue cards. Read one question aloud, and allow enough time for the students to think of the answer. If the answer appears on a student's card, the student places a marker on that square. When a student has marked five squares in a row (or a diagonal) on his or her card, that student wins. The student should read off his or her answers to see if they are correct. At this point, all of the clues read aloud so far can be discussed. Playing may resume until all of the clues have been read aloud at least once and then discussed by the class. It's a good idea to include some "blind clues" for which there are no corresponding answers--just to keep the students on their toes!

Bingo clues and answers

1. Female reproductive cell---*ovum*
2. This special cell is produced in the testes of the male---*sperm*
3. This pear-shaped organ is the baby's home for the first nine months of life---*uterus*
4. The path traveled by the ovum between the ovary and uterus---*Fallopian tube*
5. The opening at the base of the uterus which must enlarge for the baby to pass through it---*cervix*
6. This passage is also referred to as the birth canal---*vagina*
7. The involuntary uterine movements that help to push the baby out into the world---*contractions*
8. Results from the division of the fertilized egg---*zygote*
9. Bone-like material like that in the nose---*cartilage*
10. A clear yellow, high protein fluid that is the forerunner of breast milk---*colostrum*
11. Causes an increase in fluid retention in body tissues and rapid weight gain---*salt*
12. A doctor who specializes in the care and treatment of women---*gynecologist*

13. Condition occurs more often in women who have poor diets; may cause high blood pressure, sudden weight gain from fluids, and protein in the urine--- *toxemia*
14. An insufficient amount of this nutrient will impair ossification of bones and teeth of the fetus---*calcium*
15. Average optimal weight gain in pregnancy---*25 pounds*
16. This may be caused by an extreme thyroid condition---*cretinism*
17. A childbirth technique in which medications and medical techniques are used under the supervision of a physician---*traditional*
18. A type of childbirth which is totally unmedicated pregnancy, labor, and delivery---*natural*
19. The expulsion of the baby with feet first---*breech birth*
20. A surgical slit made to avoid tearing the tissue between the vagina and rectum---*episiotomy*
21. Beginning labor with the use of medication---*induced labor*
22. A defect resulting from the body's inability to metabolize milk sugar, galactose---*galactosemia*
23. A metabolic disorder in which the body is unable to metabolize fats in the nervous system---*Tay-Sachs disease*
24. A disease caused by a chromosomal defect wherein there is an extra chromosome in the affected child's cells---*Down's syndrome*
25. Because one-third of the mother's supply of this nutrient is needed for building the blood of the fetus, the physician will often prescribe this supplement to the diet---*iron*
26. An incurable hereditary disease that affects one in ten black Americans---*sickle cell anemia*
27. A conditioned response, prepared-childbirth method with option for medication---*Lamaze*
28. The name of the specialist who delivers babies---*obstetrician*
29. The growing baby is called by this name during the first six to eight weeks of life---*embryo*
30. This term refers to the baby during its last 32 weeks in the uterus---*fetus*

31. This disease is the milder of the two major venereal diseases, but can cause serious complications, including blindness, if untreated---*gonorrhea*
32. These carry the genes and determine different traits in a person, such as eye color and sex---*chromosomes*
33. The number of chromosomes in one fertilized human egg---*46*
34. The number of chromosomes in one sperm or one unfertilized ovum---*23*
35. If this disease is contracted in the third or fourth month of pregnancy, it can cause serious birth defects in her unborn child---*German measles*
36. This connecting stalk acts as a supply line between mother and baby---*umbilical cord*
37. This is an early sign of pregnancy---*nausea*
38. One of a pair of small, almond-shaped organs which releases eggs---*ovary*
39. A spongy organ that serves as a vehicle for the nourishment of the unborn baby and the elimination of its waste products---*placenta*
40. This is one thing the doctor tests a woman's blood for in a prenatal examination; if incompatible in mother and baby, it can cause serious complications---*RH Factor*
41. This happens when one egg and one sperm unite and begin to grow into a new organism---*fertilization*
42. This organ begins to function just 25 days after conception---*heart*
43. This is the attention given to a mother and baby before birth. It includes visiting a doctor regularly, proper nutrition, exercising moderately, and getting plenty of rest---*prenatal care*

Materials Needed: Clue cards--type or write the clues and short answers on 3 x 5 cards. Forty-three playing cards--divide 5 x 8 inch cards into twenty-five squares (five across and five down). Print or type one short answer from the clue list in each square. There are a total of forty-three answers with only twenty-five on each card. The best results are obtained when a different card, in terms of answers and arrangement, is made for each student or team. Markers, buttons, or felt pieces may be used to cover answers on cards.

Reference: Adapted from an idea by Justice, Kathryn W. Forecast, December 1979, pp. 30-31.

2. Title: Crossword Puzzle

Description: Complete the crossword puzzle on "Prenatal Care" (Student Handout #7)

Key: Across

- 4. embryo
- 7. premature
- 8. salt
- 9. fetus
- 12. iron
- 14. ovum
- 16. cervix
- 18. thyroid
- 19. Lamaze

Down

- 1. sleep
- 2. zygote
- 3. gynecologist
- 5. heart
- 6. twins
- 8. sperm
- 10. induced
- 11. toxemia
- 13. fear
- 15. guilt
- 17. syphilis

Materials Needed: Copies of puzzle

3. Title: Dot-to-Dot Game

Description: Students complete the Dot-to-Dot game (Student Handout #8). A list of statements is given in Column A. Column B contains the responses to Column A. Each student will read the statement and match the correct response to that statement. Example: If no. 1 in Column A, matches no. 4 in Column B, the student will draw a line from 1 to 4. Continue in this manner until the baby is completed.

Key: Lines are drawn between the following sets of numbers. For example, a line is drawn from dot 1 to dot 2.

- 1, 2
- 3, 4
- 5, 12
- 7, 16
- 9, 20
- 11, 27
- 13, 24
- 15, 26
- 17, 30
- 19, 36
- 21, 40
- 23, 38
- 25, 42
- 27, 44
- 29, 48
- 31, 50
- 33, 34
- 35, 52
- 37, 32
- 39, 18
- 41, 8

43, 14
45, 10
47, 6
49, 54
51, 56
53, 58
57, 62
59, 64
61, 66
63, 68
67, 72
69, 74
71, 76
73, 78
75, 80
77, 82
79, 28
81, 46

Materials Needed: A copy for each student

UNIT INSTRUCTIONAL AIDS

1. Title: Vocabulary--TV Screen

Description: Use a cardboard box; on two opposite sides make four holes, two at the top and two at the bottom. These holes must be directly opposite each other. Make the holes about one inch from the corners. Two rollers are needed. The holes must be large enough for the rollers to go through. Allow enough length in the rollers to extend about two inches outside the box on each side. Cut a window in the front of the box. White or brown paper will be needed, and the width of the paper must coincide with the size of the box. Write the vocabulary words from the lesson on the paper, spacing them some distance apart. Attach the completed word sheet to the rollers. Turn the rollers to show a word. Allow students time to write the definitions. Have an overhead projector set up to flash the definitions, or make a tape of the definitions and play it for the students. In either situation, allow students to make corrections if necessary.

Materials Needed: Cardboard box, two rollers, paper, felt pens, glue, overhead projector, transparencies, or tape and tape player

2. Title: Bulletin Board

Description: Use "Keep the Door Open During Prenatal Development" (Figure #18) as a bulletin board during the prenatal unit. Behind the open door, write in factors that represent good prenatal care.

Materials Needed: Colored paper, felt pens

UNIT EVALUATION

1. Title: Pretest

Description: Read each statement. Write the word "true" by the statements that are correct and "false" by those that are incorrect.

1. False Identical twins occur when the ovaries release two egg cells and each egg cell is fertilized by a separate sperm cell.
2. True A child's mental potential, certain emotional traits, and most physical ones are determined at conception.
3. True "Lightening" is the process in which the fetus shifts position so that it is lower in its mother's pelvis and starts to enter the birth canal.
4. False A zygote results from the early division of the sperm cell after fertilization.
5. False Medical supervision is not necessary until the third month of pregnancy.
6. True One of the first signs of pregnancy is the cessation of menstrual periods.
7. False The unborn baby receives food through the Fallopian tube.
8. False Avoid pregnancy after the age of twenty-five.
9. True Teenagers usually have more miscarriages than women in their twenties.
10. True Pregnancy is a period of stress and problems are inevitable.
11. True Psychological stress is also experienced by the father.
12. False Expectant mothers should double their intake of food because they are eating for two.
13. False Toxemia causes low blood pressure, sudden loss of weight, and protein in the urine.
14. False The optimal weight gain in pregnancy is thirty-five pounds.
15. True Obese women tend to have trouble during childbirth.
16. True Avoid all drugs during pregnancy.
17. True Smokers tend to have more miscarriages, stillbirths, and infant deaths than non-smokers.

18. False Cretinism is caused by an extreme iron deficiency.
19. False An example of natural childbirth is the Lamaze method.
20. True Tay-Sachs disease occurs most frequently among Jews with ancestors from Central and Eastern Europe.

Materials Needed: A copy for each student

2. Title: Review Sheet

Description: The following question can be used as a review activity. Select the correct answer and write the letter in the blank.

1. B The end of the Period of the Ovum is known as
- separation
 - implantation
 - incorporation
 - differentiation
2. A The embryo receives its food from the
- umbilical cord
 - uterus
 - Fallopian tube
 - cervix
3. B The average optimal weight gain during pregnancy is
- ten pounds
 - twenty-four pounds
 - thirty pounds
 - thirty-five pounds
4. C The most widely known of embryo damaging disease is
- Cystic fibrosis
 - Cerebral palsy
 - German measles
 - Polio
5. C The Lamaze method is an example of
- Natural childbirth
 - Traditional childbirth
 - Prepared childbirth
 - None of the above

6. D The number of chromosomes contained in a single egg cell is
- forty-six
 - twenty-four
 - thirty-two
 - twenty-three
7. D The ball of cells resulting from the early division of the egg cell after fertilization is called a
- fetus
 - ovum
 - womb
 - zygote
8. B A clear, yellowish, high protein fluid that is the forerunner of breast milk is called
- lactose
 - colostrum
 - estrogen
 - progesterone
9. D The period of recovery after childbirth is known as
- conception
 - ovulation
 - miscarriage
 - postpartum
10. B Infant mortality of teenage mothers as compared to children born to women in their twenties is
- the same
 - higher
 - lower
 - none of the above

DISCUSSION

11. Distinguish between fraternal and identical twins.

Identical twins occur when the egg released by the ovary of the female is fertilized by the sperm released from the male and completely divides to produce two separate cells which continue to grow and develop into two different individuals having the same genetic make-up.

Fraternal twins occur when two separate eggs are released by the female and are fertilized by two different sperm released by the male, each growing and developing as two distinctly different individuals with separate genetic make-up.

12. How does the diet of the expectant mother differ from the normal diet?

The diet of the expectant mother must be well-balanced, including proteins, carbohydrates, and fats with additional supply of milk from which is provided calcium for the growth and development of bones and teeth of the fetus.

13. How do smoking and alcoholic beverages affect the prenatal child?

Smokers have more miscarriages, stillbirths, and infant deaths than non-smokers. Smoking also causes the uterine and placental blood vessels to contract, reducing the oxygen and food supply to the embryo. Alcohol may cause the infant to be smaller, have sub-normal intelligence, and may affect motor development.

14. Explain what occurs during the three stages of prenatal development.

The Period of the Ovum is usually thought of as the first two weeks of prenatal development. It actually covers the time from the moment of fertilization until the zygote is implanted in the lining of the uterus. The Period of the Embryo begins with the implantation and lasts until approximately the end of the second month. All the different body systems are developed at this time. At the end of this period, the embryo will look just like a miniature human being. The Period of the Fetus is the third phase of prenatal development, when the miniature baby continues to grow in size in preparation for birth. It continues until the end of nine calendar months, when the baby's weight is about 7 or 8 pounds and its length is about 21 inches.

15. Name and describe the three childbirth techniques.

Traditional occurs in the hospital, employing medications and medical techniques under the supervision of a physician. Natural is totally unmedicated pregnancy, labor, and birth. Prepared advocates the use of anesthetic and obstetrical techniques when required; however, less medication is needed during labor.

Materials Needed: Copies for students

3. Title: Review Sheet

Description: Complete the Unit Review Sheet (Student Handout #9) by arranging the drawings in the order that each occurs. In the blank provided, write the number that corresponds with the stage of development.

Materials Needed: A copy for each student

4. Title: Unit Test

Description: Following is a written unit test that can be used as a basis for evaluating student progress.

Write "true" in the blank if the statement is correct or "false" if the statement is not correct.

- True 1. Conception is the process by which a single sperm cell from the male unites with an egg cell from the female to form a single cell capable of growing into a new individual.
- False 2. Identical twins occur when the ovaries release two egg cells.
- True 3. There is never any mixing of the embryo's blood and the mother's blood.
- True 4. The cessation of menstruation is one of the first noticeable signs of pregnancy.
- False 5. An expectant mother will need to visit her doctor every two weeks during a normal pregnancy.
- True 6. Healthier babies result when the mother is well-nourished prior to conception.
- False 7. Lack of calcium during the prenatal period can cause muscle spasms and leg cramps for the mother, but will not affect the development of the fetus.
- False 8. Parturition is when a child is born feet first.
- True 9. A mother who is over the age of thirty-five and having her first baby has a higher risk of birth defects than a twenty-five year old mother.
- True 10. Three to five days is a normal hospital stay following birth.

Select the best answer and write the letter in the blank.

- B 1. The organ that joins the mother to the unborn baby and through which food and oxygen pass is the
- a. Womb
 - b. Placenta
 - c. Fallopian tubes
 - d. None of the above

- B 2. A fully formed, miniature unborn baby is referred to as a(n)
- Ovum
 - Fetus
 - Embryo
 - Zygote
- A 3. A danger signal that a pregnant woman should report to her doctor immediately is
- Severe abdominal cramps
 - Increased urination
 - Shortness of breath
 - All of the above
- D 4. An initial visit to a physician, during pregnancy, usually includes
- Advice regarding nutrition, exercise, and other health habits
 - Family history of disease
 - Urinalysis and blood tests
 - All of the above
- C 5. The average optimal weight gain during pregnancy is
- Five to seven pounds
 - Ten to fifteen pounds
 - Twenty to twenty-four pounds
 - Thirty to forty pounds
- B 6. The most widely known disease that damages the embryo is
- Chicken pox
 - German measles
 - Flu
 - None of the above
- A 7. The prepared delivery technique most widely used in the United States is the
- Lamaze technique
 - Caesarean section
 - Forcep delivery
 - None of the above
- B 8. A sign of imminent labor is
- Heartburn
 - Regular uterine contractions
 - Nausea
 - All of the above

- C 9. A test that is very useful in determining genetic disorders early in a pregnancy is
- Pap smear
 - Metabolic disorder exam
 - Amniocentesis
 - All of the above
- B 10. For women who do not breast feed their babies, menstruation usually resumes
- Two weeks after delivery
 - Six to eight weeks after delivery
 - Three to five months after delivery
 - None of the above
- A 11. A clear, yellow, high-protein fluid that is the forerunner of breast milk is
- Colostrum
 - Lactose
 - Eströgen
 - None of the above
- B 12. The ball of cells resulting from early division of the egg cell after fertilization is called a(n)
- Ovum
 - Zygote
 - Fetus
 - None of the above
- D 13. The period of recovery after childbirth is known as
- Miscarriage
 - Ovulation
 - Conception
 - Postpartum
- B 14. Anemia is caused by
- A genetic disorder
 - An iron deficiency
 - A drug addiction
 - None of the above
- A 15. A doctor who specializes in delivering babies is a(n)
- Obstetrician
 - Midwife
 - Gynecologist
 - All of the above

Answer these questions.

1. Couples can react to stress in various ways. Name some positive reactions to stress during pregnancy.

Verbalizing and communicating, becoming more informed, learning to accept minor changes as normal, getting medical attention.

2. What effects do addictive drugs that the mother has taken during pregnancy have on the newborn infant?

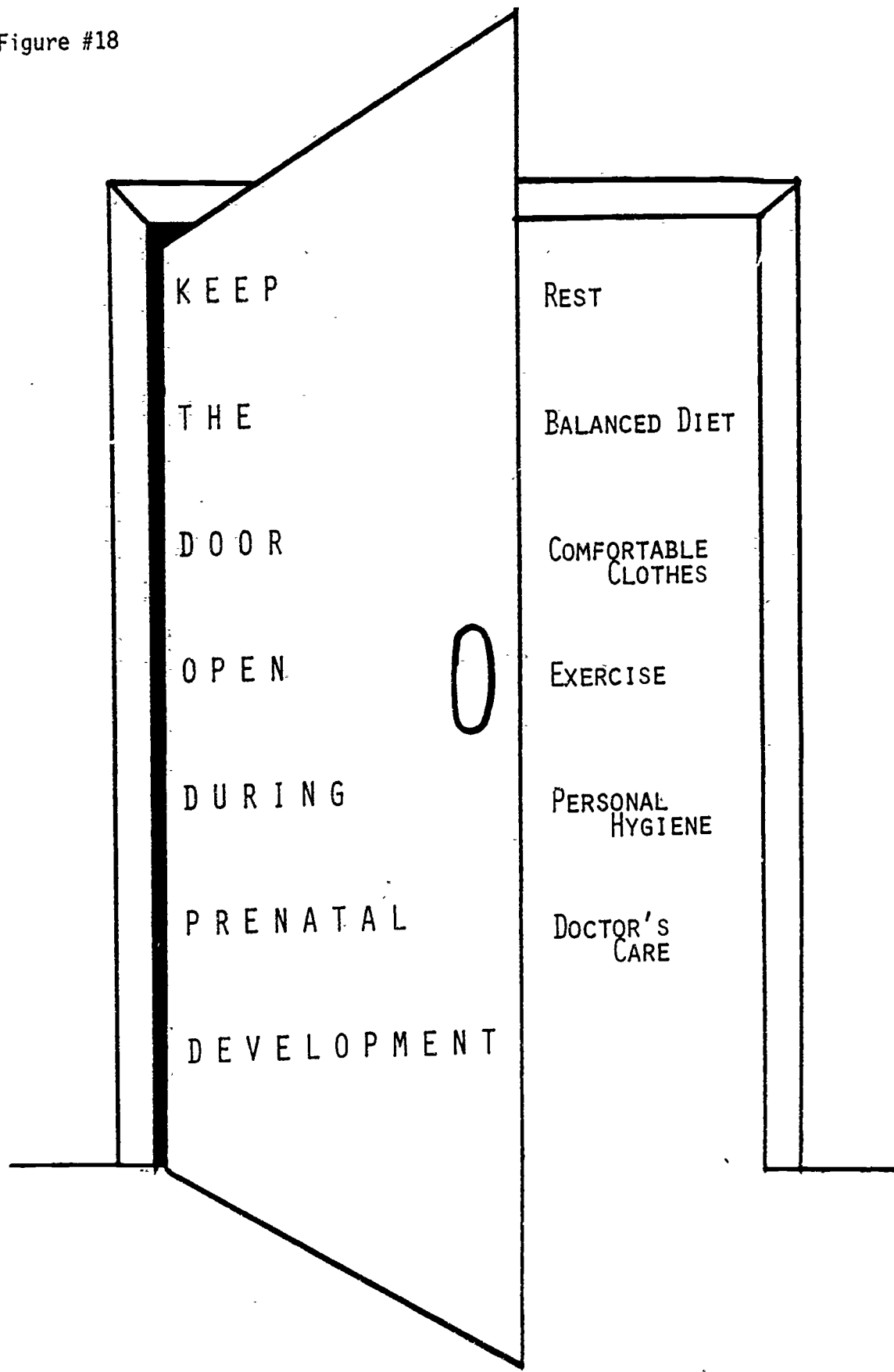
1. *Possible birth defects.*

2. *More likely to have low birth weight and other signs of immaturity.*

3. *Can also be addicted and suffer withdrawal.*

Materials Needed: Copies of test

Figure #18



Student Handout #7-Continued

ACROSS

4. The growing baby during the first six to eight weeks of prenatal development.
7. Born before the full nine months.
8. A substance that can cause an increase in fluid retention and rapid weight gain.
9. Refers to the baby during its last 32 weeks of prenatal development.
12. A nutrient that is often given in supplement form to pregnant women.
14. Female reproductive cell.
16. The opening at the base of the uterus that must enlarge for the baby to pass through it.
18. A gland.
19. A popular prepared childbirth method.

DOWN

1. Rest
2. Results from the division of the fertilized egg.
3. A doctor who specializes in the care and treatment of women.
5. An organ that begins to function just 25 days after conception.
6. Identical and fraternal.
8. A male reproductive cell.
10. Beginning labor with the use of medication.
11. A condition that may cause high blood pressure, sudden weight gain from fluids, and protein in urine.
13. An emotion that is often felt by expectant mothers, especially if they have inadequate knowledge of the birth process.
15. A feeling expressed by women who do not want the child they are expecting.
17. A venereal disease.

Dot-to-Dot Game
Student Handout #8



Student Handout #8-Continued

<u>COLUMN A</u>	<u>COLUMN B</u>
1. Female reproductive cell	2. Ovum
3. Male reproductive cell	4. Sperm
5. Birth canal	6. Uterus
7. Results from division of the fertilized egg	8. Fallopian tube
9. A clear yellow, high protein fluid that is the forerunner of breast milk	10. Cervix
11. Food that causes the body to retain fluid	12. Vagina
13. Doctor who specializes in care of women	14. Contractions
15. Nutrient needed for proper development of bones	16. Zygote
17. Caused by an extreme thyroid condition	18. Cartilage
19. A surgical slit made during delivery	20. Colostrum
21. Beginning labor with the use of medication	22. Salt
23. Expulsion of baby feet first	24. Gynecologist
25. Condition of inability to metabolize milk, sugar, or galactose	26. Calcium
27. A metabolic disorder in which fats are not metabolized in the nervous system	28. 24
29. Incurable disease that affects one in ten black Americans	30. Cretinism
31. Nutrient needed for the building of blood	32. Traditional
33. Type of childbirth in which medication is not used	34. Natural
	36. Episiotomy
	38. Breech birth
	40. Induced labor
	42. Galactosemia
	44. Tay-Sachs disease
	46. Down's Syndrome
	48. Sickle cell anemia
	50. Iron
	52. Lamaze

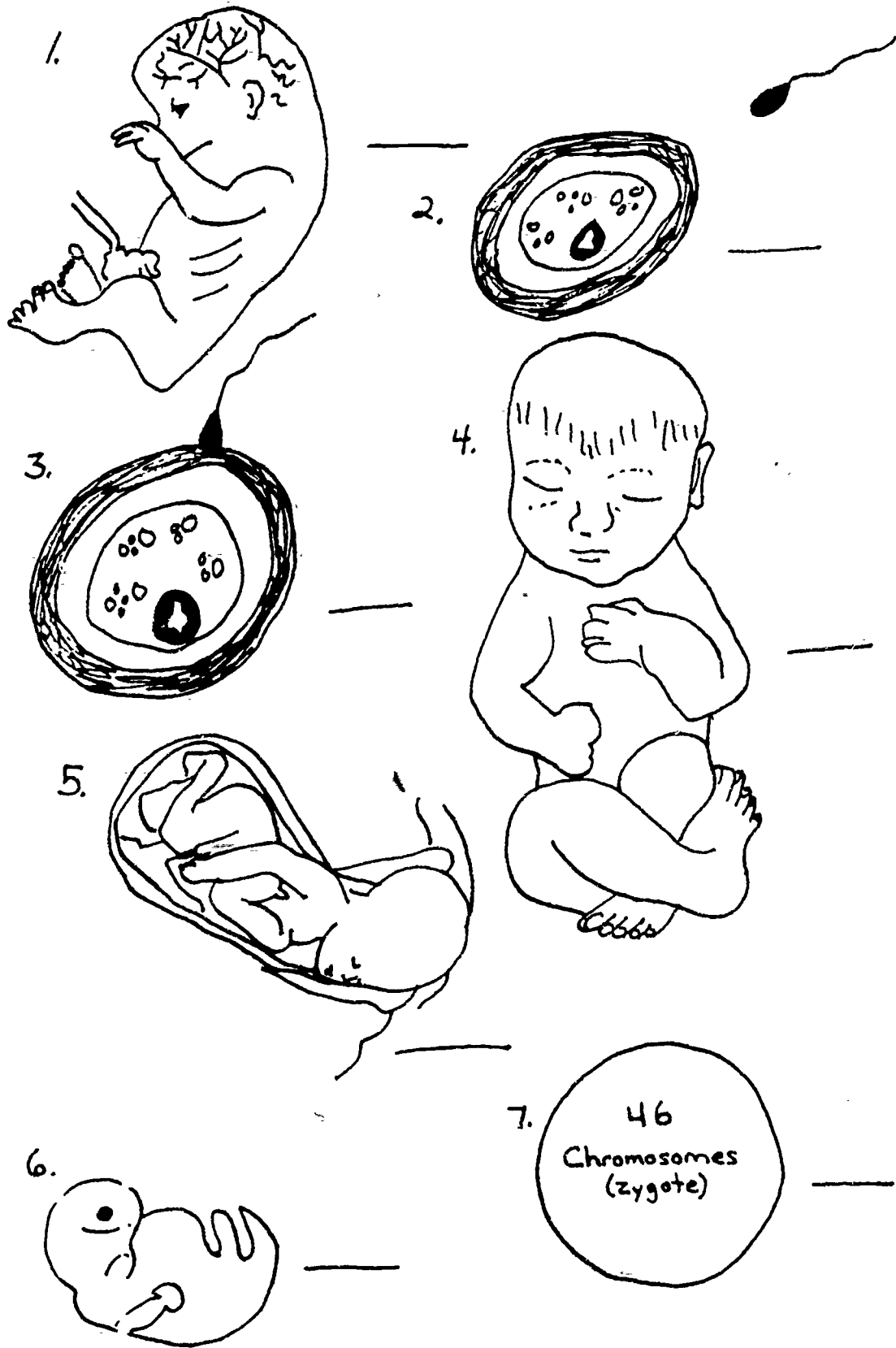
Student Handout #8-Continued

- | | |
|---|--------------------|
| 35. A conditioned-response child-birth method | 54. Obstetrician |
| 37. A childbirth technique in which medication and medical techniques are used under the supervision of a physician | 56. Embryo |
| 39. A bone-like material | 58. Fetus |
| 41. The path traveled by the ovum between the ovary and the uterus | 60. Gonorrhoea |
| 43. Involuntary uterine movements that help push baby out into the world | 62. Chromosomes |
| 45. The opening at the base of the uterus | 64. 46 |
| 47. Home for the baby for the first nine months of life | 66. 23 |
| 49. A doctor who delivers babies as a specialty | 68. Syphilis |
| 51. The growing baby during the first six to eight weeks of life | 70. German measles |
| 53. The term used to refer to baby during its last 32 weeks in the uterus | 72. Umbilical cord |
| 55. The milder of the two major venereal diseases | 74. Nausea |
| 57. These carry the genes | 76. Ovary |
| 59. The number of chromosomes in one fertilized egg | 78. Fertilization |
| 61. The number of chromosomes contained in one sperm or one unfertilized egg | 80. Heart |
| 63. The most serious type of VD | 82. Prenatal care |
| 65. Rubella | |
| 67. Supplies | |
| 69. Early sign of pregnancy | |

Student Handout #8-Continued

71. The organ that releases the egg of the female
73. Occurs when one egg unites with one sperm
75. Organ begins to function just 25 days after conception
77. Attention given to a mother and baby before birth
79. The number of pounds considered to be the average optimal weight gain in pregnancy
81. A disease caused by a chromosomal defect in which there is an extra chromosome in the affected child's cells

Stages of Development - Review Sheet
Student Handout #9



UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Physical Growth and Development

GENERALIZATIONS

1. Physical growth in young children is continuous, but uneven.
2. Physical development occurs in an orderly pattern, and all children go through a similar sequence of development.
3. The very rapid physical growth of infancy slows down in early childhood.
4. Developing bones, muscles, and fat during early childhood change the child's proportions and appearance.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define the terms related to physical growth in children.
2. Name and describe three directions of growth in infants and toddlers.
3. Explain how physical growth can be measured.
4. List growth characteristics of children from birth to three years of age.

OUTLINE

- I. General Patterns of Growth
 - A. Directional
 1. Cephalocaudal
 2. Proximodistal
 - B. Continuous
- II. Influences on Development
 - A. Internal
 - B. External

III. Growth Characteristics

- A. Physical Characteristics at Birth
- B. Changes in Height and Weight from Birth to Three Years of Age
- C. Changes in Body Proportions from Birth to Three Years of Age
- D. Development of the Nervous System
- E. Development of Bones, Muscles, and Fat
- F. Development of Senses
- G. Development of Teeth

REVIEW OF SELECTED LITERATURE

Growth and development in the child follows a predictable pattern. The human body develops directionally, meaning that certain parts of the body will be further developed or more mature than other parts. One direction is cephalocaudal, which proceeds from the head downward to the trunk (Ambron, 1975). The infant's neck and trunk develop before the legs and feet, because they are closer to the head (Bee, 1978).

Proximodistal development proceeds from the trunk or center outward. The trunk of the body develops and then the arm and leg muscles develop. Notice that cephalocaudal-proximodistal development illustrates that physical development or maturation proceeds from the greatest concentration of nerve tissue outward, i.e., from the brain down and from the spinal cord out.

Growth is continuous from birth throughout life; however, the rate may vary. Growth is most rapid before birth and during infancy. In the preschool years (ages three to six) the growth gradually slows and is steady. At puberty growth once again becomes more rapid.

Physical development in children can be affected either favorably or unfavorably by internal and external factors. Internal factors include (1) the amount and nutritional value of food eaten by the child, (2) the functioning of the child's glands and (3) the child's genetic endowment (Draper & Draper, 1979). External factors include (1) activities, (2) exercise, (3) education, (4) relationships with family and friends, (5) accidents, illness, or damaging disease and, (6) cultural factors, such as child-rearing practices.

At birth the infant has a rounded chest, high shoulders and short neck. About one-fourth of the total length of the newborn infant is

head, and the child has a top-heavy appearance. The hunched over position of the fetus in the womb causes the spine to form a curve like a "C." As soon as breathing starts after birth, the infant's neck and spine begin to straighten because the head must be lifted for breathing. This action causes the ribs to begin to slope downward, the shoulders to drop, and the length of the neck to increase. The chest broadens as the ribs begin to slope downward (Ambron, 1978).

The newborn's abdomen is large and protruding. Arms and legs, in proportion to the rest of the body, are short and thin, and the hands and feet are small. Sometimes a heavy growth of fine-textured hair called "lanugo" is found on the baby's head, back and arms. This hair usually disappears soon after birth (Hurlock, 1978).

Newborn infants average seven and one-half pounds in weight and twenty inches in length. Male babies tend to be slightly heavier and slightly longer than female babies (Terry, Sorrentino, & Flatter, 1979). During the first year, infants increase eight to ten inches in height and triple their birth weight (Ambron, 1975).

The rate of growth is much slower during the second year. The average child grows about four inches and gains three to five pounds during the second year of life (Mussen, Conger, & Kagen, 1979). By age two, the child has reached about fifty percent of its mature height. The rate of growth during the third year is approximately the same as during the second.

During the first year, when the trunk grows fastest, it becomes longer, the shoulders broader, and the stomach flatter. During the second and third years, the legs grow fastest. By three years of age, the child's arms and legs have grown longer in proportion to the body, although toes and fingers are short in proportion to feet and hands (Hurlock, 1978).

The skeleton of the infant is composed largely of cartilage, a soft bone-like material similar to that in the tip of the nose. The baby is very agile because of the softness and flexibility of the cartilage. The pelvis is small and not connected to the thigh bones; during infancy the rib cage is open wider in the front than it is later in life, and generally, the bony frame is more open than an adult's. The relatively larger spaces between the bones give the infant's joints a flexibility that gradually decreases as the child grows older. This flexibility enables a child to put its foot into its mouth and suck its toes rather than its fingers.

Beginning before birth, a hardening process called "ossification" begins as the cartilage is gradually changed to true bone tissue. This process continues slowly throughout childhood. The flexibility of the skeleton is particularly noticeable in spots called "fontanel" on the baby's skull, which are easily seen on the top of the head.

The fontanelles allow space for the brain to grow. These bones begin to close between twelve and eighteen months after birth and are well hardened by the time the child is two years old (Hurlock, 1978).

During the second year, the bones increase in size and hardness. While the bones are soft, children should be discouraged from sitting in chairs made for adults. The half-lying, sitting position may result in a slight curvature of the spine (Mussen et al, 1979).

Muscle tissue comprises one-fourth of the total body weight at birth. The muscles grow in a cephalocaudal sequence. A young baby's best-developed muscles are those of the eyes, mouth, and respiratory tract. Generally, the large muscles function better than the smaller ones (Braga & Braga, 1975).

Two layers of tissue overlay the muscle--a fat layer and a layer that includes skin, hair, and nails. Fat pads the frames of infants and small children, giving them the chubby look. During the first nine months, the layer of fat thickens rapidly and then decreases until it is only one-half as thick by the time the child is five.

Care should be taken to insure that the child does not become overweight. Recent research suggests that fat deposits developed in infancy contribute to overweight conditions in adulthood.

During the second and third years, the child's strength increases markedly as muscles develop (Mussen et al, 1979). Hurlock (1978) states that the child with broad thick muscles tends to be physically stronger than the child with slender muscles. Energy levels seem to be related to the amount of muscle tissue and fat tissue. The more muscle tissue the child has, the more energetic the child (Hurlock, 1978).

At birth the infant possesses most, if not all, of the cells that will compose the brain. At the end of three years, the brain reaches seventy-five percent of its total adult weight (Mussen et al, 1979). As the nervous system develops, the ability to make new, finer, and more precise movements increases. The brain controls reflexes of the baby at birth. The section of the brain that controls body movement develops earlier than the part that controls learning (Hurlock, 1978). The cells controlling the upper trunk, neck and arms develop first; those cells controlling the legs and head follow (Ambron, 1975).

In order for the brain to transmit information with maximum efficiency, a process known as "myelination" must occur. This process consists of covering parts of the nerves with a fatty tissue that markedly increases capacity to conduct impulses.

The sense organs at birth are well-developed and function at varying degrees. They mature rapidly during the early months of life. At a few days of age, the infant's eyes can follow moving objects. Recent studies indicate infants can focus on objects as early as one

week. They can focus best on objects about eight inches from their faces. It is interesting to note that this is the approximate distance a mother's face is from the infant's when it is nursing.

Babies hear well at birth, and it is believed they have a keen sense of smell. Hearing becomes very clear for babies within a few days of birth. Young infants can discriminate time, pitch, and intensity of sounds. Through intrauterine experiments, it has been proven that babies have a preference for sweet substances over salty ones, even before birth.

The baby's skin has the same sense organs for touch, pain, and temperature as the adult's (Hurlock, 1978). Because the baby's skin is thinner, it feels pain, touch, and temperature more keenly than adults.

By birth all the baby teeth and a few permanent teeth are developed even though they do not appear until around the middle of the first year. The newborn baby's jaws not only contain the twenty baby teeth, but also are producing the thirty-two permanent teeth (Ambron, 1975). The order or sequence in which the teeth are cut is more important than the age of the baby. Teeth appear in a predictable sequence and usually come in at the rate of about one tooth a month until the baby is two to two and one-half years old. Usually the lower front teeth come in followed by the upper front ones. When teeth are not cut in the proper sequence, the jaw may be thrown out of line and cause the permanent teeth to be out of line (Ambron, 1975). The face grows as teeth grow. The growth of the jaw influences both the growth of the face and the position of the teeth.

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- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- Mussen, P. H., Conger, J. J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.
- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

SUGGESTED READINGS

Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

Very easy to read and contains comprehensive information.

Bee, H. The developing child. New York: Harper & Row, 1978.

Technical reading. Information very thorough; may be too advanced for most high school students.

Draper, M. W., & Draper, H. C. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.

A well-written text covering all phases of child care. Useful for and within the reading ability of most students.

Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

A well-written and easy to read text for lower level high school students. Comprehensive in the information on child development.

Mussen, P. H., Conger, J. J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.

An interesting text covering all areas of child development. Not very useful for a high school text because reading level is very high.

LEARNING ACTIVITIES

1. Title: Word Game

Description: Complete the "Missing Letters Game" (Student Handout #10).

- | | | |
|------|------------------|----------------|
| Key: | 1. Proximodistal | 11. Very |
| | 2. Hearing | 12. External |
| | 3. Young | 13. Lower |
| | 4. Soft | 14. One-fourth |
| | 5. Infant's | 15. Pain |
| | 6. Cephalocaudal | 16. Muscle |
| | 7. Amount | 17. Education |
| | 8. Lanugo | 18. Newborn |
| | 9. Development | 19. Twelve |
| | 10. Exercise | |

Materials Needed: Copies of game

2. Title: Crossword Puzzle

Description: Complete the "Crossword Puzzle - Infant and Toddler Physical Development" (Student Handout #11).

<u>Key:</u>	<u>Across</u>	<u>Down</u>
	1. Flexible	1. Fat
	3. Ossification	2. Downward
	8. Rapid	4. Stages
	10. Energy	5. Fontanel
	12. Hearing	6. Cartilage
	13. See	7. Order
	14. Fetal	9. Positions
		11. Fifty

Materials Needed: Copies of puzzle

3. Title: Research Assignment

Description: A new baby will respond to various stimulation with predictable movements called reflexes. Determine some of the reflexes a baby will have.

Materials Needed: Reference books

4. VOCABULARY

1. Cephalocaudal Development--Development that proceeds from head downward to the trunk.
2. Proximodistal Development--Development that proceeds from the trunk or center outward.
3. Stages of Development--Periods of time during which certain characteristics appear or are most apparent.

EVALUATION

Title: Pretest

Description: The following questions could be used as a pretest or a post-test.

Write "true" if the statement is true and "false" if the statement is false.

1. False Infants cannot see for at least one month after birth.
2. True Babies hear well at birth.
3. True The baby's skin has the same sense of touch, pain, and temperature as the adult's.

4. True By birth, all the baby teeth and a few permanent teeth are developing.
5. False The age at which the teeth are cut is more important than the order or sequence.
6. False Physical growth is more rapid during the preschool years than in infancy.
7. False Newborn infants average eight and one-half pounds in weight and twenty-two inches in length.
8. True By age two, the child has reached about fifty percent of its mature height.
9. True The skeleton of the infant is composed largely of cartilage.
10. False Generally, the smaller muscles of the infant function better than the larger ones.

Match each term with the correct definition.

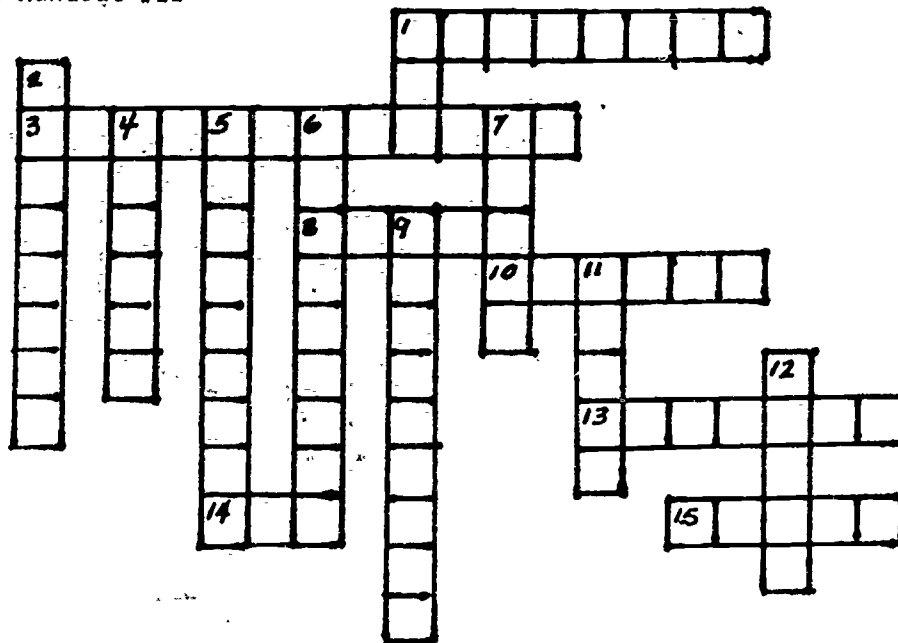
- | | |
|---|---|
| 1. <u>c</u> Cephalocaudal | a. periods of time during which certain characteristics appear or are most apparent |
| 2. <u>a</u> Stages of Development | b. activities, exercise, education, relationships with friends, family accidents and illnesses, damaging diseases, cultural factors |
| 3. <u>e</u> Internal factors affecting physical growth | c. development that proceeds from the head downward to the trunk |
| 4. <u>g</u> Proximodistal | d. a heavy growth of fine-textured hair, sometimes found on the newborn's head, back, and arms |
| 5. <u>b</u> External factors affecting physical growth | e. the amount and nutritive value of food eaten, functioning of the child's glands, and the child's genetic endowment |
| 6. <u>d</u> Lanugo | f. hardening process of the bones |
| 7. <u>h</u> Fontanels | g. development that proceeds from the trunk or center outward |
| 8. <u>i</u> Flexibility | |
| h. spots on the baby's head which allow the brain to grow | |
| i. enables a child to put its foot into its mouth and suck its toes | |

Missing Letters Game
Student Handout #10

Fill in the blanks with the correct letters.

1. _____ development proceeds from the center
outward.
2. _____ is a sense that is well developed at birth.
3. _____ infants have a curved spine because of the fetal position.
4. _____ bone-like material similar to that in the tip of the nose
is cartilage.
5. _____ joints are very flexible due to the relatively
large spaces between the bones.
6. _____ development proceeds from the head
downward.
7. _____ and nutritional value of food is an internal factor
affecting growth.
8. _____ is the fine textured hair found on the baby's head,
back, and arms.
9. _____ in children follows a predictable pattern.
10. _____ is an external factor affecting physical growth.
11. _____ rapid growth takes place before birth and during infancy.
12. _____ factors such as cultural practices affect physical
growth.
13. _____ front teeth usually come in first, before the upper teeth.
14. _____ of the total length of the newborn infant is
head.
15. _____ is felt more keenly by babies because of their thinner skin.
16. _____ tissue comprises one-fourth of the total body weight
at birth.
17. _____ can even be an external factor affecting growth.
18. _____ infants average seven and one-half pounds in weight.
19. _____ to eighteen months after birth the skull bones begin
to close.

Crossword Puzzle - Infant and Toddler Physical Development
Student Handout #11



Across

1. An infant's joints are very _____.
3. The hardening process of the bones.
8. The rate of growth during the first year is very _____, but slows down during the second year.
10. _____ levels are related to the amount of muscle tissue.
13. The sense of _____ is well developed within a few days after birth.
14. Babies begin to _____ objects when they are about one week old.
15. Babies have a hunched over posture because of their _____ positions.

Down

1. During the first nine months, the layer of _____ thickens rapidly, giving babies a chubby look.
2. The human body develops in outward and _____ directions.
4. _____ of development are periods of time during which certain characteristics appear.
5. "Soft spots" on a baby's skull.
6. Soft bone-like material that makes up most of an infant's skeleton.
7. The _____ in which teeth appear is more important than the age.
9. Various sleeping _____ are desirable for young infants because of their soft bones.
11. Young infants can focus best on objects about _____ inches from their faces.
12. By age two, the child has reached about _____ percent of his/her adult height.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Nutrition

GENERALIZATIONS

1. Children have certain basic physical needs that must be met for healthy growth and development.
2. Every child's physical development depends in part on eating well-planned meals and snacks.
3. Children's physical needs, like most other needs, change with age.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define "nutrition" and "health" and tell how they are related.
2. Explain the importance of good nutrition for infants and toddlers.
3. List general guidelines for feeding infants.
4. Develop a feeding schedule for introducing solid foods into the infant's diet.
5. Discuss the need for nutritional supplements during infancy and early toddlerhood.
6. Name some common feeding problems of children and explain how they can be dealt with.
7. Differentiate between nutritional and non-nutritional snack foods.

OUTLINE

- I. Nutrition and Health
 - A. Definitions
 - B. Importance of Nutrition in Maintaining Health
- II. Guidelines for Feeding Infants and Toddlers
 - A. Infants
 1. Breast or bottle

2. Introducing solid foods
 - a. general guidelines
 - b. promoting food acceptance
 - c. common feeding problems

B. Toddlers

1. Eating with the family
2. Snacks
 - a. importance
 - b. suitability
3. Influences on food acceptance

REVIEW OF SELECTED LITERATURE

Nutrition is defined by Hutchins (1979) as the foods eaten and how the body uses them. Children need the proper amounts and kinds of foods in order to be healthy. Health is the total well-being of the physical body, the emotions, the mind and the spirit (Hutchins, 1979).

Some effects thought to result from improved nutrition have been noted in infants observed since 1930. One effect observed was improved motor development manifested in early creeping and crawling. Also, the children observed walked alone at an early age (Johnson & Medinnus, 1974).

Because of the rapid growth during the prenatal period and first year of life, adequate nutrition is important. Recent studies indicate that prolonged malnutrition during gestation and early infancy, when the brain undergoes a rapid spurt of growth, brings about specific, and sometimes irreversible, effects on motivation, attention span, and arousal in small children. Severely malnourished babies tend to develop into children with motor difficulties, caused by the failure to develop sufficient numbers of muscle cells in motor control tissues, or the failure of cells to mature after development (Johnson & Medinnus, 1974).

Zeskind and Ramey (1978) reported that the full-term malnourished infant shows poor response to stimulation and has deficient social interaction. However, after birth, if proper nutrition is supplied and the child is centered in the proper environment, the infant can be restored to a normal response level.

Retarded growth is the most common manifestation of gross malnutrition in children (Formon, 1976). Deficiency of caloric intake, of protein, or of any of the essential nutrients seems to be responsible for decreased growth.

Another nutritional problem found in infants and toddlers is excessive weight for height (Formon, 1976). A number of investigators report an association between obesity in infancy and childhood with obesity in adulthood. Still another problem, iron deficiency anemia, is seen most commonly in infants of low birth weight, full-sized infants between six months and twenty-four months of age, and children from low income families (Formon, 1976).

From ages two to three, growth of muscles and bones occurs rapidly. Adequate nutrition in the form of protein, vitamins, and minerals is necessary to insure proper growth and strength of the skeleton. Malnutrition is evidenced by lack of energy, low resistance to colds and infection, poor muscle tone, unhealthy skin, softened bones, poor teeth and gums, easily bruised skin, and sensitivity of eyes to light (Draper & Draper, 1979).

Milk is the infant's first food, and for the first year, the primary source of nutrients. Breast feeding is recommended because most of the baby's nutritional needs are provided in the mother's milk. Vitamin A, D, and C supplements are frequently prescribed for infants.

Iron supplements, either in drops or iron-fortified formulas, are important to most bottle-fed babies because cow's milk does not contain enough iron to provide for the natural decrease in the infant's own iron supply and the increased demand that comes with rapid growth. Breast-fed infants are not as likely to need iron supplements because the iron present in the breast milk is well absorbed by the baby (Partie, 1978). In addition to requiring sufficient iron for rapid growth and increasing blood volume, children need small amounts of iron to replace that lost through the gastro-intestinal tract, through the skin, and in the urine (Formon, 1976).

Usually, by around the third month, babies, by drooling or biting, indicate a readiness to add semi-solid foods to their diets. By this time swallowing becomes voluntary and the digestive system is able to handle more complex food (Braga & Braga, 1975).

The care giver's attitude during feeding should be relaxed. If tenseness in the care giver is felt by the infant, it may cause the infant to reject the food (Brisbane, 1971). Friction between infant and care giver in this situation is often the beginning of longterm feeding problems (Pipes, 1977). New foods should be introduced to the infant in small amounts at first. Usually, iron-fortified cereal is the first solid food given. To aid in swallowing, processed cereal foods may be diluted by liquid. A baby may take several weeks to really accept a food. New foods should be offered at the beginning of a meal when the baby is hungry and readily accepts what is offered (Brisbane, 1971). A semi-solid food is usually given to the child once a day for the first two or three weeks. After that time, two solid foods per day may be offered (Brisbane, 1971).

A current trend reported by Partie (1978) is the avoidance of starting solid foods too early. Three reasons are given for this: (1) the baby may consume too many calories and develop obesity problems that remain throughout life, (2) a higher incidence of allergic reactions is being noted when too many foods are started too soon, and (3) the baby does not need solid foods if breast milk or formula is adequate. Once the baby begins to eat cereals, egg yolk, and strained foods, opportunities for providing all the essential nutrients are increased, and vitamin and iron supplements are no longer needed (Partie, 1978).

By eight or nine months, the baby is ready to join the rest of the family at mealtimes. Care givers and parents should be aware that as

babies and toddlers join the rest of the family at mealtime, an opportunity exists to teach the child certain eating behaviors. In a study by Highberger and Carothers (1977), it was found that the food intake of children increased when the food was served at the table by an adult and when the adult ate with the children. Making a change in the service of food and allowing the toddler to eat with others as early as possible seem to facilitate the ability of the child to eat independently and to learn mealtime and social eating skills.

Children like to eat and will eat wholesome foods if they are provided. Smelling and touching food before placing it in the mouth is a part of eating. Mashing, squeezing, and playing with foods is a natural phase of learning for children (Draper & Draper, 1979).

Toddlers should be offered a selection of foods that contain all the fundamental nutrients. These nutrients include carbohydrates, protein, fat, vitamins and minerals. Foods should include vitamin D fortified milk; eggs and easy-to-chew meats, and cheese; whole grain or enriched cereal products; and a variety of fruits and vegetables, including a good source of vitamin C daily (Helms & Turner, 1976).

Between-meal snacks should supplement the toddler's diet rather than undermine it. Toddlers should be taught which foods are nutritional to prevent their developing a strong desire for "junk foods" (Partie, 1978). Partie (1978) suggests some guides for parents to provide nutritious foods as snacks. Unsweetened fruit juices may be substituted for soda and instant, artificially flavored drinks, and candy should not be used as a reward because this gives empty calorie foods too much attention. Fresh fruits, juices, and vegetables are recommended snacks.

As a child progresses through the stages of development, it is not unnatural for eating habits and patterns to change. This tendency is shown in changes in appetite or sudden likes and dislikes for foods. As the rate of growth slows, appetite decreases. Dawdling at mealtime is a childhood habit that bothers some care givers. It is not unusual for children to ask for the same food day after day and then suddenly refuse to eat it. Refusing to open the mouth and accept food may be a change in the pattern of eating. Children under the age of three often go through a period of insisting on rigid routines or rituals such as placing the chair, the dishes, and foods in definite spots. In all these situations, it is better for the adult to avoid making an issue of the problem. Respecting the child's wishes and providing satisfaction in this area helps the child through the period of rigidity. Providing an orderly pattern for the child's daily activities, including meals, may be necessary for the child's emotional and physical well-being (Draper & Draper, 1979).

Many parents create problems related to the child's eating behavior. However, feeding problems may have a physical basis. Colic is a painful feeding problem in some young infants for up to three months and is caused by an overactive nervous system that makes gas form in the baby's bowels. Celiac disease is an inability to digest simple foods such as cereals, potatoes, sugar, bread, candies and milk. Food allergies may cause rashes, internal discomfort, or illness. Lack of appetite causes some parents to worry needlessly about the child's food intake, because as growth slows during

the second year, appetite normally (or naturally) decreases. The problem of the infant's refusing to give up the bottle may be overcome by enlarging the holes in the nipple to such an extent that taking the bottle is no longer fun because it is more like drinking rather than sucking. "Spitting up" in babies usually is not a serious matter. The refusal of children to feed themselves causes no real harm for a short while. Some non-self feeders may have poor motor coordination that makes feeding themselves difficult. Refusal of vegetables is a common problem. The stress put on the problem, the better. Offering the refused vegetables in new ways and presenting the food in small quantities may help (Ames, 1979).

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SUGGESTED READINGS

Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

A well-written text for high school students containing information on the child from the prenatal stage through the early school years. Discusses nutrition. The chapters are short and easy reading for average or slow students.

Hatchins, B. Child nutrition and health. New York: McGraw-Hill, 1979.

A very current book on nutrition and how health is affected by nutrition. Very easy to read.

Partie, D. Gift of good health: Childhood nutrition. Harper's Bazaar, 1978, 112, 178-179; 191.

This is a magazine article written by a registered nurse that is easy to read and understand. Specific topics discussed are childhood nutrition from birth through adolescence, causes of childhood obesity and suggestions for alleviating the condition, and "junk" foods in the diet.

LEARNING ACTIVITIES

1. Title: Game

Description: Complete "Nutrition for Infants and Toddlers Word Scramble and Word Search" (Student Handout #12).

Key: Word Scramble

1. Nutrition
2. Health
3. Creeping
Crawling
Walking
Nutrition

4. Rapid
Important
5. Motivation
Attention

Key: Word Search

milk
bottle
sterilized
cereal
play
vitamin
iron
close
fruits
air

1. milk
2. bottle
3. sterilized
4. iron
5. fruits
6. cereal
7. play
8. vitamin
9. close
10. air

Materials Needed: Copies of game
132

165

2. Title: Display

Description: Prepare a display of child nutrition information. Include magazine articles, pamphlets, and books. Books could be of a technical nature and/or an easier to read popular type. The display should be attractive and eye-catching.

Materials Needed: Magazine articles, pamphlets, books, various materials, such as poster paper for a background. A folding cutting board covered with quilted fabric makes an excellent background for a display.

3. Title: Research Assignment

Description: Using various reference materials, determine the Recommended Daily Dietary Allowances for calories, protein, calcium, iron, vitamins A and C, and thiamin for children at four months, ten months, and two years. Fill in this chart.

	Calories	Protein	Calcium	Iron	Vit. A	Vit. C	Thiamin
4 months	Poundsx53.2	Poundsx1.0g	360mg	10mg	1400 IU	35mg	.3mg
10 months	Poundsx49.1	Poundsx0.9g	540mg	15mg	2000 IU	35mg	.5mg
2 years	1300	23g	800mg	15mg	2000 IU	40mg	.7mg

Materials Needed: Copies of chart, reference books with RDA charts

Reference: U.S. Department of Agriculture-Science and Education Administration. Nutritive value of foods. Washington, D.C.: U.S. Government Printing Office, 1978.

4. Title: Meal Planning Assignment

Description: Plan menus for one day for a nine-month-old child, a child between one and two years old, and a child between two and three years of age. Indicate the amount of each food and the amount of basic nutrients in each food. Add up the amounts of each nutrient for the day for each child and determine if the RDA's were met.

Materials Needed: Charts of nutritive values of foods

5. Title: Tasting Party

Description: Taste various prepared baby food items (strained and junior) and homemade baby foods.

Materials Needed: Baby foods, blender, food, plastic forks, paper plates

6. Title: Observation

Description: Observe a toddler eating by himself. Note time, neatness, and any special equipment used.

Materials Needed: Clipboard, paper, pen

7. Title: Special Project

Description: List several cereals that children like to eat for breakfast. Compare the sugar levels of these cereal products.

Materials Needed: Cereal packages

8. VOCABULARY

1. Nutrition--Foods eaten and how the body uses them.
2. Colic--Pain caused by an overactive nervous system that makes gas form in the digestive tract of young infants.
3. Celiac Disease--An inability to digest simple foods.

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Ask students to bring pictures of nutritious snacks suitable for toddlers. Use "Keep Toddlers on the Right Track" (Figure #19) bulletin board and put the snack ideas into the train cars.

Materials Needed: Backing, letters, construction paper, markers, cotton balls to make steam

2. Title: Transparency

Description: "Let's Hear It" (Figure #20) transparency can be used when discussing the practical aspects of feeding a toddler.

Materials Needed: Transparency materials, overhead projector

EVALUATION

1. Title: Pretest

Description: The following true-false statements could be used as a pretest.

Write "true" in the blank if the statement is true, write "false" if the statement is false.

- True 1. Retarded growth can usually be observed in the grossly malnourished child.
- False 2. Excessive weight shows that a child is well-nourished.
- True 3. Iron deficiency anemia is seen most commonly in infants of low birth weight.

- True 4. Breast-fed infants are not as likely to need iron supplements.
- False 5. Human milk is perfect for the infant; therefore, no supplements should be prescribed.
- True 6. Semi-solid foods are usually added to the baby's diet around the third month.
- True 7. Starting solid foods too early may cause the baby to consume too many calories and develop obesity problems that remain throughout life.
- False 8. A higher incidence of allergic reactions is being noted when too few foods are introduced early in the infant's diet.
- False 9. A new food should be introduced every day until the baby is getting a variety from the basic four food groups.
- True 10. By eight or nine months, the baby is ready to join the rest of the family at mealtimes.
- False 11. If the baby doesn't like a new food, just add a little sugar and a pinch of salt.
- True 12. It is normal for the baby to want to smell and touch his food before putting it into the mouth.
- True 13. Between-meal snacks should supplement the toddler's diet.
- False 14. Ice cream or candy is a good reward for the toddler who cleans his plate.
- True 15. Unsweetened fruit juices may be substituted for instant, artificially flavored drinks and soda.

Materials Needed: Copies of test

2. Title: Writing Assignment

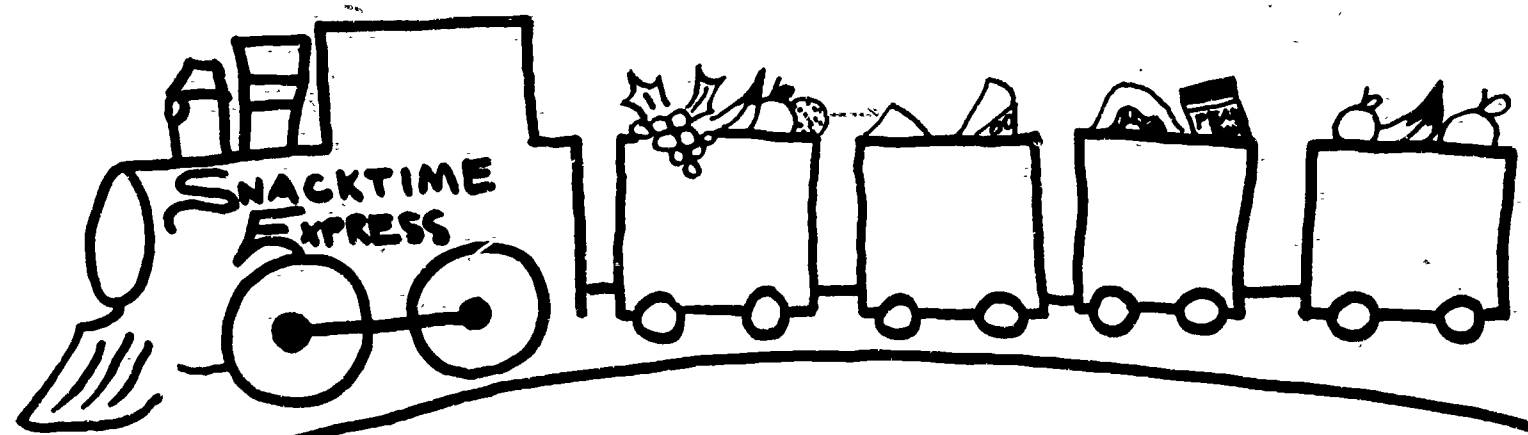
Description: Explain why good nutrition at this early age is so important. Give the results of malnutrition at this age.

Materials Needed: Paper, pen

KEEP TODDLERS ON THE

Figure #19

136



RIGHT SNACK TRACK

169

170

Figure #20



LET'S HEAR IT
FOR THESE
FEEDING TIPS

THE CHILDREN WILL APPRECIATE THESE

1. Plan a Variety of Colors and Textures in Foods.
2. Cut Meat Into Small Pieces.
3. Very Hot and Very Cold Foods May Not Taste as Good as Warm Foods.
4. Place Only a Small Amount on the Plate. The Child Can Request More if Desired.
5. Let Children Feed Themselves, But Help When They Get Tired.
6. Avoid Vegetables With Strings. Peel Apples.
7. Avoid Gummy Foods That Stick to the Roof of the Mouth.
8. Save the Glass of Milk for the End of the Meal Since a Whole Glass of Milk at the Beginning May Not Leave Much Room for the Food.
9. Arrange for the Child To Sit With Feet on the Floor or the Step of a High Chair.
10. Provide The Child With a Special
 - A. Plate That Has High Sides
 - B. Spoon That Has a Short Handle
 - C. Fork That Has Dull Tines
 - D. Cup With a Large Handle

Nutrition for Infants and Toddlers Word Scramble and Word Search
Student Handout #12

WORD SCRAMBLE

- IINRUTTNO 1. _____ is defined as the foods eaten and how the body uses them.
- EATHLH 2. _____ is the total well-being of the physical body, the emotions, the mind, and the spirit.
- REECINGP
ALWRCGIN
GINKALW
TUTNIORN 3. Many children are showing earlier motor development by _____ and _____ at seven months and _____ alone at eleven months. These behaviors may be a result of better _____.
- PADIR
TANTIMPOR 4. Because of the _____ growth during the prenatal period and first year of life, adequate nutrition is _____.
- VATIONTIMO
TATTENION 5. Prolonged malnutrition during gestation can sometimes bring about irreversible effects on _____, _____ span, and arousal in small children.

WORD SEARCH

m i l k o s t m g f
k r b c p c d o g r
b o t t l e a t f u
a n e o a r c r o i
c s s u y e i o x t
e e v i t a m i n s
s t e r i l i z e d

1. The infant's first food is _____.
2. If an infant isn't fed by breast, he is fed by _____.
3. Bottles should be _____.
4. Milk alone doesn't have enough of the mineral _____ for the baby.
5. _____ are usually added to the infant's diet after cereal.
6. _____ is usually the first solid food added to the baby's diet.
7. Toddlers sometimes like to _____ in their food because it is fun.
8. Human milk tends to be lacking in _____ D.
9. When giving an infant a bottle remember to hold the baby _____ to you.
10. Milk should cover the nipple of the bottle when baby is sucking to prevent excessive _____ from being taken in.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Methods of Feeding the Infant

GENERALIZATIONS

1. Breast feeding is considered by many to be the best and simplest way to give a baby a good start.
2. Self-demand schedules meet the baby's own needs for feeding.
3. Self-regulation is an important part of demand feeding.
4. Burping a baby will eliminate air in the baby's stomach after feeding.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List some advantages and disadvantages of breast feeding.
2. Identify some advantages and disadvantages of bottle feeding.
3. Discuss the terms "self-demand schedule" and "self-regulation feeding."
4. Describe the proper way to burp a baby.

OUTLINE

- I. Methods of Feeding
 - A. Bottle Feeding
 1. Advantages
 2. Disadvantages
 - B. Breast Feeding
 1. Advantages
 2. Disadvantages
- II. Feeding Process
- III. Schedules for Feeding
 - A. Self-demand
 - B. Self-regulation
- IV. Feeding Problems

REVIEW OF SELECTED LITERATURE

There are two methods of feeding an infant--by bottle or by breast. Each method has its advantages and disadvantages. The expectant mother should carefully study these two options and then choose the method that best fits her needs, her infant's needs, and the family's lifestyle. The decision should be made well in advance of delivery, and the physician should be informed about the decision.

Bottle feeding requires the purchase of bottles, bottle liners or equipment to keep bottles sterile, and formula. There are many different kinds of formula on the market today, and the pediatrician can recommend the one best suited to the individual infant. Some advantages of bottle feeding are as follows: the mother is not "tied down" as much and does not have to be present physically when the baby is fed, and, also, other people can be involved in the feeding process. Often the father enjoys being involved in this way. Disadvantages include having to wait until the formula warms before it can be given to the baby, mixing formula and time and effort required in preparing the bottles, and the expense of the formula (Hurlock, 1978).

Breast feeding is the most natural and practical way to feed a baby. Because of the advantages for both mother and baby, many doctors are encouraging women to consider this method. The major disadvantage of breast feeding is that it ties the mother down. This factor may be important if the mother is very active or planning to work following the baby's birth. The advantages for the mother include helping the uterus to contract more quickly and completely following delivery. Convenience, availability, and proper temperature of milk are all factors to consider when making the decision of how the baby is to be fed. Some research even indicates that there may be a correlation between breast feeding and absence of breast cancer.

The baby, as well as the mother, may profit from the breast-feeding method. Human milk is ideal for a baby because it contains adequate quantities of nutrients, assuming a balanced diet on the part of the mother. Breast milk not only provides nourishment, but it is the food most suited to a baby's digestive system. Mother's milk also offers built-in protection against some diseases and infections during the first few months of the infant's life. The process of sucking from the breast requires more work on the part of the infant and is more likely to satisfy the infant's sucking needs, as well as developing the infant's facial muscles (Hurlock, 1978).

"Colostrum" is the yellowish substance produced in the breasts and present from the time of birth up to approximately the third day after delivery. Especially suited to the needs of the newborn baby, colostrum is easy for the baby to digest because it is low in fat and carbohydrate content. It is also rich in immunity factors and has a slight laxative effect, clearing out the meconium in the newborn baby's bowels. The breasts work on a supply and demand basis. The more the baby sucks, the more the milk is produced. About three to five days after delivery, the colostrum in the breasts is replaced by human milk.

Breast feeding is a natural method of feeding, but it requires learning about nipple care, breast care, sucking responses in the infant, and breast alternating technique, as well as other factors. These things should be learned prior to the birth in order to help the first few days of nursing go more smoothly and comfortably for the mother and the infant.

For best results, the person feeding the child should be relaxed, comfortable, and interested in caring for the child. Holding an infant in the arms while breast or bottle feeding offers the comfort of close cuddling. Tiny babies need continuous reassurance from adults in order to feel secure and confident. They need to feel that others care about them (Draper & Draper, 1975).

During the first two or three months, burping is part of the feeding process. Feeding the baby in a semi-sitting position will permit swallowed air to rise to the top of the baby's stomach, which placement will more easily allow for the elimination of air when the baby is burped. Some babies are not easily burped and require the finding of a special position, such as over an adult's shoulder, lying on the stomach on an adult's lap, or even in a sitting position. If the baby fusses when put to bed following a feeding, inadequate burping may be indicated. Placing the baby on the stomach is best after feeding to allow for additional burping. In this position the baby is less likely to choke if spitting up occurs (Draper & Draper, 1975).

A mother must also choose between two types of feeding schedules for her child, a set schedule or self-demand schedule. The set schedule includes specified times for feeding, usually every three or four hours. Sometimes, enforcing a very rigid schedule will upset the infant, especially if the hunger pattern does not fit the schedule. The self-demand approach is based on the belief that the child should be fed only when hunger is shown by crying or agitation. Most babies seem to respond quite well to this approach. The primary difference in a feeding schedule is who will set the schedule--mother or baby. Sometimes a combination of the two types is used (Ames, 1979; Draper & Draper, 1975).

At two to four months of age, babies should begin to take food in new forms and by new methods. Opinion as to proper starting time varies from doctor to doctor, and a physician should be consulted about when and what types of food to begin giving the baby (Hurlock, 1978).

REFERENCES

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

SUGGESTED READINGS

Cattell, P. Raising children with love and limits. Chicago: Nelson-Hall, 1972.

An amusing, down-to-earth book on child rearing practices. Each chapter has a very clever title such as "Eating is a Privilege," and "Nights are for Sleeping."

Pearlman, R. Feeding your baby: The safe and healthy way. New York: Random House, 1971.

This volume is divided into two parts "Food and Love," and "Cooking for Baby." The text is simple to understand. There are excellent recipes included for feeding the infant.

Pryor, K. Nursing your baby. New York: Harper & Row, 1973.

Good for young couples to read in preparation for parenthood. Very descriptive information. Describes the nursing experience from the function of the breast in producing milk to the weaning process.

Raphael, D. The tender gift: Breast feeding. Englewood Cliffs, New Jersey: Prentice-Hall, 1973.

Dr. Raphael attempts to answer the question, "How can we adapt our contemporary life styles to provide the support which a new mother needs to care for, nourish, and cherish her baby?" The author refers to this experience as "mothering the mother."

Smart, M. S., & Smart, R. C. Infants: Development and relationships. New York: Macmillan, 1978.

Selected readings on prenatal development and birth, early infancy, and social and personal development. Excellent illustrations.

LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Invite a LeLeche League member to speak on advantages and disadvantages of breast feeding and bottle feeding.

Materials Needed: Letter confirming date and time, thank you letter

2. Title: Display

Description: Set up a display of various equipment and products used in feeding infants. Include different types of bottles, bottle warmers, spoons for feeding infants and self-feeding spoons, infant feeders, etc. Discuss advantages and disadvantages.

Materials Needed: Various equipment and products

3. Title: Debate

Description: Divide into groups and debate the issue of breast feeding versus bottle feeding.

Materials Needed: None

4. Title: Demonstration

Description: Demonstrate the following techniques:

- I. Methods of preparing formula and sterilizing
- II. Warming a bottle
 - A. Leave on counter
 - B. Warm in a pan or bottle warmer
 - C. Microwave oven
- III. How to check temperature
- IV. Proper way to hold an infant for feeding
- V. How to burp a baby
 - A. Over an adult's shoulder
 - B. Lying on stomach on an adult's lap
 - C. In a sitting position

Materials Needed: Sterilizing equipment, tongs, pan, 4-cup measuring cup, towels, bottles, nipples, rings, caps, formula (3 types of commercially prepared: ready-to-pour, concentrated, powder), baby doll

5. VOCABULARY

1. Colostrum--The substance produced before a mother's milk comes in; yellowish substance that is especially good for newborns.
2. Set schedule--Specified times for feeding a baby, usually every three to four hours.
3. Self-demand schedule--Feeding the baby only when hunger is indicated by crying or agitation.

INSTRUCTIONAL AID

Title: Transparency

Description: Use transparency on "Advantages and Disadvantages of Bottle and Breast Feeding" (Figure #21) when discussing this topic.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Post-test

Description: The following list of matching questions might be useful in constructing a post-test.

Match the correct definition with the words listed below.

- | | |
|---------------------------------|--|
| 1. <u>a</u> Set schedule | a. specified times for feeding, usually every 3-4 hours |
| 2. <u>k</u> Weaning | b. what a baby drinks from a bottle |
| 3. <u>d</u> Self-demand | c. a baby should not be fed more than this number of times a day |
| 4. <u>h</u> Uterus | d. based on the belief that the child should be fed only when hunger is shown by crying or agitation |
| 5. <u>i</u> Supplemental bottle | e. during the first two or three months this is a part of the feeding process |
| 6. <u>b</u> Formula | f. placing the baby on this is best after feeding to allow for additional burping |
| 7. <u>i</u> Choke | g. formula should be this temperature |
| 8. <u>c</u> Six | h. is helped to contract by breast feeding |
| 9. <u>g</u> Lukewarm | i. a nipple with a large hole will cause this |
| 10. <u>e</u> Burping | j. can be given occasionally if a mother breast feeds |
| 11. <u>f</u> Stomach | k. this is the process of getting a child used to taking milk from a bottle instead of breast, or from a cup instead of breast or bottle |

Figure #21

Bottle Feeding

Advantages

1. Other people can be involved in the feeding process.
2. More freedom for mother.

Disadvantages

1. Requires the purchase of special equipment and formula.
2. Have to wait for formula to warm.
3. Extra time and effort is required for preparation of bottles.

Breast Feeding

Advantages

1. Economical
2. Helps the mother's uterus contract more quickly and more completely after delivery.
3. Convenient
4. Always the right temperature.
5. Research indicates a correlation between breast feeding and absence of breast cancer.
6. More suited to a baby's digestive system.
7. Offers protection against infection.
8. More likely to satisfy a baby's sucking needs.

Disadvantages

1. May be inconvenient for a mother who works or is away from home during the day.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Selecting Clothes for the Infant and Toddler

GENERALIZATIONS

1. The amount and type of clothing children need change as the child progresses from being a relatively inactive infant to an active toddler.
2. The infant's clothes should include snap crotches for easy and quick dressing.
3. Self-dressing skills should be encouraged and developed, using the child's clothing as a tool.
4. Children's clothes need self-help features, freedom for movement, and durable construction in washable fabrics.
5. Clothing provides warmth and protection, as well as enhancing play experiences.
6. Safety features should be considered when choosing clothing for children.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Discuss the amount and type of clothing children need as they develop from infants to toddlers.
2. Identify self-help features for children's clothing.
3. List ways clothing affects infants and toddlers.
4. Describe features in clothes for toddlers that promote safety.
5. Name features in clothing for toddlers that help to develop (a) independence and self-confidence; (b) sensory perception; and (c) manipulative and coordination skills in the child.

OUTLINE

- I. Importance of Appropriate Clothes
- II. Clothing for Infants
 - A. Type

B. Comfort

C. Care

III. Clothing for Toddlers

A. Type and Amount

B. Self-help Features

C. Safety Features

IV. Clothes and the Child's Personality

REVIEW OF SELECTED LITERATURE

Clothes begin to have an effect on the personality of children as soon as they begin to be interested in learning to dress themselves. Clothes liked by young children lift their spirits. Clothes disliked may undermine their self-confidence (Hurlock, 1978).

Clothing for children should be appropriate for their needs and interests if they are to gain self-satisfaction, pride, and independence. Clothes have different meanings and values to children and adults. Current fashion is usually unimportant to children under three years of age. Care must be taken to prevent too much emphasis on clothes, for too much stress may produce a materialistic outlook on life. Parents and care givers must try to teach children not to judge other children on the basis of clothes because few children have much say in what they wear. Parents or care givers should not choose clothes that may become the cause of jokes or that may get too much attention (Hurlock, 1978).

The fewer clothes infants wear and the easier they are to put on the less frustrated babies will be. Babies need freedom to move different parts of their bodies and to exercise muscles. Clothing that gets in the way of these movements will slow growth and the development of control over different parts of the body. Babies should not be overdressed. Because sweat glands do not work very well, overdressing is likely to cause prickly heat and other skin rashes. For babies, clothes should be chosen for temperature of the home and not the season of the year.

Everyday attire for infants includes the diaper, a shirt or kimono when indoors during the day, and a sleeper (a one piece garment with feet) for nightwear. Shoes and socks are not needed. Avoid booties because unless that are tied too tightly, they seldom stay on. As clothes worn while the baby is an infant are outgrown, they should be replaced with clothes that do not get in the way of movement. A sleeper, proper outdoor wear, overalls or a sunsuit, shoes, and bibs are among wardrobe additions (Hurlock, 1978).

During their second year, toddlers are beginning to walk and are beginning to be toilet trained. Diapers are replaced by training pants and waterproof pants. For play, toddlers wear clothes that allow them to move easily, such as shirts with shorts, pants, or skirts. Overalls and sweaters may be worn when the weather is cool. Sun suits with training pants may be worn in the summer. Socks are worn with shoes to prevent blistering. The first shoes have flexible soles and soft tops. After the toddler masters the skill of walking, a less flexible-soled shoe is used. Some doctors recommend that no shoes be worn in the house or on grass during the summer to encourage the development of foot and leg muscles. Pajamas may be added to the wardrobe during this time.

Safety of a child, always a primary concern of adults, should be considered when selecting clothes. Outer clothing of bright colors helps the child to be more easily visible to motorists. Buttons, snaps, buckles, and other decorations should be securely attached so children cannot pull them off and put them in the mouth, nose, or ears. Belts, ties, and sashes should be securely attached to the garment so these cannot choke, trip, or cut off circulation if children misuse them (Draper & Draper, 1979).

Clothes should be fire-resistant and made of non-flammable fabrics. All clothes sized 0 through 6X must pass a strict flame test or be permanently and conspicuously labeled "flammable" (Draper & Draper, 1979). Labels should also state if children's clothes have been treated with TRIS, a chemical finish the National Cancer Institute has labeled potentially cancer-causing and hazardous to a child's health. Today in the United States, TRIS-treated sleepware, by law, should not be available. Should a care giver or parent suspect a child's garment does have TRIS on it, the garment should be machine washed at least three times in hot water and detergent. This will virtually eliminate any chemical residue from being absorbed through the child's skin or being ingested by chewing on the fabric as infants often do (Van Leeuwen, 1978).

Clothes should fit properly to allow freedom of movement without tripping and falling. Properly fitted shoes are necessary for stability in balance and moving about (Draper & Draper, 1979).

Knowing what to look for when choosing clothes for children is important. To select clothing that helps children develop to the greatest extent, as well as conserve money, the following guidelines should be considered.

The infant's clothing should have snap crotches for ease in diaper change, easy on-and-off styles, sufficient room for reaching, crawling and creeping, and reinforced areas where there is strain, such as the knees of pants and elbows of sleeves (Draper & Draper, 1979).

As the child grows older, self-dressing skills should be encouraged and developed, using the child's clothing as a tool. These garments should have easy-to-recognize fronts and backs, large neck openings for slipovers, pants and shorts with elastic at the waist, easy-to-reach pockets and buttons, attached belts that fasten in the front, and large, easy-to-operate zippers (Draper & Draper, 1979).

Sensory perception in children is promoted with clothing. Children learn concepts of texture, color, and spatial relationships (Draper & Draper, 1979).

Manipulation, dexterity, and coordination skills are encouraged with clothes that contain certain features. Two-year-olds enjoy manipulating buttons, snaps, and zippers. Most types of fasteners can be handled by three-year-olds (Draper & Draper, 1979).

Children also learn concepts of up and down with zippers, of colors and shapes with bright colored iron-on patches, and of mixing and matching with appropriately colored and patterned tops and bottoms.

An important fact to remember is that children's clothes undergo hard wear. Fabrics should wear well and be washable and easy to care for. Children's activities should never be restricted, except for very special occasions, in order to prevent clothing from being soiled. Children should feel good about their activities and uninhibited by fear of punishment, which may occur if clothes are soiled (Draper & Draper, 1979).

REFERENCES

Draper, M. W., & Draper, H. C. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.

Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

Van Leeuwen, J. What you should know about flame resistant sleepwear. Good Housekeeping, May 1978, p. 292.

SUGGESTED READINGS

Draper, M. W., & Draper, H. C. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.

This is a well-written text for child development classes. The book is thorough and interesting and includes information on clothing for children. For upper level high school students.

Hilderbrand, V. Guiding young children. New York: McMillan, 1975.

A thorough text written for adults or out-of-high-school youth. Includes section on selecting clothing for children.

Van Leeuwen, J. What you should know about flame resistant sleepwear. Good Housekeeping, May 1978, p. 292.

A short question and answer article concerning flame resistant sleepwear and the way to remove TRIS from a garment if the owner suspects the garment has been treated with the chemical.

LEARNING ACTIVITIES

1. Title: Evaluation of Children's Garments

Description: Borrow several garments from a local store. Using the following checklist, evaluate the garments.

When applicable, does this garment have quality workmanship?

1. Flat, smooth, evenly stitched seams and well finished edges.
2. Strain points reinforced or bar tacked; pockets double-stitched.
3. Buttonholes firmly bound - or stitched very closely.
4. Medium sized, round, flat buttons - sewed on securely.
5. Self-help dressing features.
6. Deep hems and pleats to allow for growth.
7. Roomy armholes and crotch to permit freedom of movement.
8. Wear well.
9. Well finished openings, easy to manage and large enough for easy dressing.
10. Weight of the garment supported from the shoulder to prevent slipping and irritation, and to promote good posture.
11. Smooth, soft, absorbent fabric, easy to launder.
12. Will this fabric shrink?
13. Will this fabric fade?
14. Will this garment have to be dry cleaned?
15. Is this fabric flammable?
16. Has this fabric been labeled treated with TRIS?

*TRIS, a chemical finish the N.C.I. has labeled potentially cancer-causing and hazardous to a child's health.

Materials Needed: Garments, copies of checklist

2. Title: Field Trip

Description: Divide the items listed below among the students. Visit a local speciality or department store. Locate the items, examine them, and record the costs. Tally the costs and discuss after returning from the field trip.

Bassinet sheet (3)	Toiletries (cotton balls, oil, lotion, powder)
Crib sheet (4)	Terry Towels and Washcloths (2 each)
Mattress Pads (4)	Sweater Sets (1)
Thermal Blankets (2)	Diapers (4 doz.)
Small waterproof pads (2)	Bibs (2)
Receiving Blankets (4)	Knit Gowns (4)
Diaper Pins (4)	Waterproof Pants (4)
5 de Snap Shirts (4)	Socks (3)
Stretch Playsuit (2)	Diaper Stacker
Bottles (12 8-oz., 4 4-oz.)	Bottle Warmer

*Items may vary due to climate, baby's furnishings and/or equipment (such as feeding apparatus or use of disposable diapers or diaper service).

Materials Needed: Arrangement with store, permission from principal, transportation arrangements, parental permission slips

3. Title: Sewing Project

Description: Construct a tablet holder that teaches self-dressing skills. Figure #22 might serve as an example.

Materials Needed: Copies of pattern, example of tablet holder already made, sturdy fabric such as denim, pillow ticking or felt, shears, sewing machines, snaps, buttons, needle, thread, zipper, tablet, large crayons

4. VOCABULARY

1. Flame retardant fabrics--Fabrics that do not burn easily.

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Cut out examples of good clothing for children from old pattern books, women's magazines, or catalogs. Arrange the pictures on the bulletin board "Togs for Tots" (Figure #23).

Materials Needed: Background, letters, yarn for clothesline, pictures, and clothes pins

2. Title: Transparency

Description: Use transparency "Current Trends in Clothing for Toddlers" (Figure #24) as an introduction to the topic. Write key words on the transparency with a grease pencil as toddler's clothing is discussed. Examples of key words: Safety, Comfort, Self-dress, Durable.

Materials Needed: Transparency materials, grease pencil, overhead projector

3. Title: Resource

Description: "Sewing for Children" is an excellent resource. It includes information on the following: (1) how clothing relates to physical development, (2) how clothing relates to social and psychological development, (3) pattern selection, (4) sizes and alterations, (5) fabric selection, notions, etc., (6) construction techniques, (7) decorative techniques, and (8) ideas for projects.

Source: "Sewing for Children" is available from Coats and Clark Inc., Consumer and Educational Affairs Department, 72 Cummings Point Road, Stamford, Conn. 06902.

EVALUATION

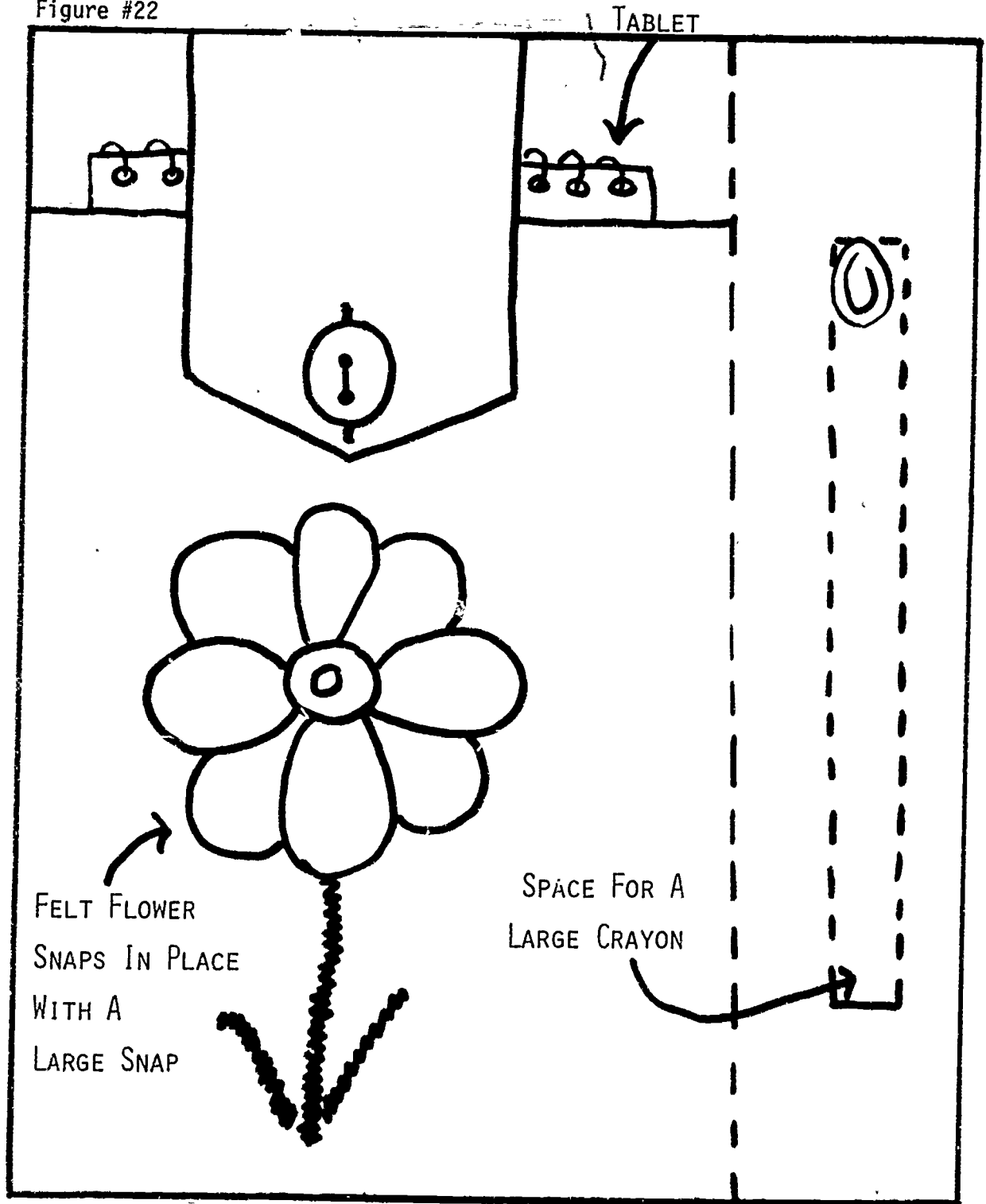
Title: Writing Assignment

Description: Select one of the following questions to answer:

- a. Identify and discuss self-help features for children's clothes.
- b. Describe features in clothing for toddlers that promote safety.
- c. Name features in clothing for toddlers that help develop:
(1) independence and self-confidence, (2) sensory perception,
(3) coordination skills.

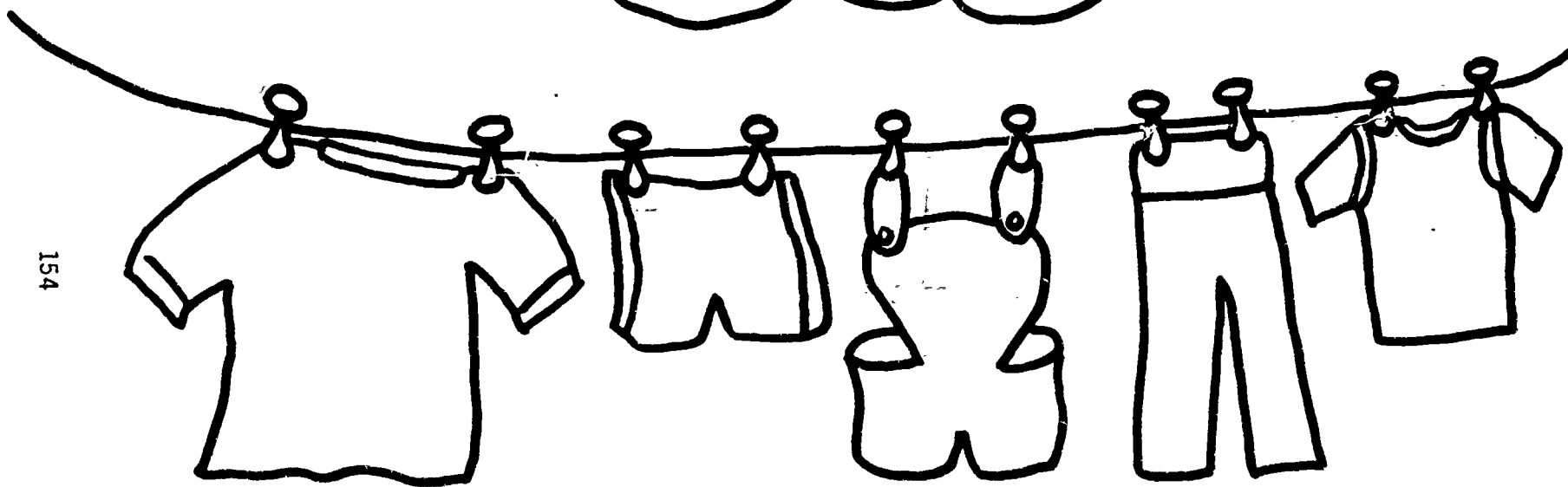
Materials Needed: Paper, pen

Figure #22



USE A PIECE OF STIFF CARDBOARD FOR BACKING TO PROVIDE STABILITY.

“TOTS”



154

FOR

TOTS

“CURRENT TRENDS”



IN CLOTHING
FOR TODDLERS

155

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Caring for the Baby

GENERALIZATIONS

1. Infants must depend upon adults to take care of their physical needs.
2. In planning for the infant's comfort, include time for feeding, bathing, and diapering in the schedule.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Describe the basic physical needs of an infant.
2. Plan a daily schedule to be used when caring for a young child, including feeding, bathing, and diapering.
3. Discuss the age for beginning toilet training and describe the procedure to use.
4. Demonstrate the proper way to support a baby and how to bathe a baby.
5. Demonstrate the proper way to diaper a baby.

OUTLINE

- I. Bathing the Baby
 - A. Room Preparation
 - B. Bathing Procedure
 - C. Shampooing Hair
 - D. Sponge Bath
- II. Diapering the Baby
 - A. Types of Diapers
 1. Cloth
 2. Disposable

III. Toilet Training

- A. Relation for Maturation and Toilet Training
- B. Age for Beginning
- C. Procedure

REVIEW OF SELECTED LITERATURE

Bathing is an excellent time to exercise tender loving care for infants. Although infants do not understand the reasons for a bath, this is a time when they begin to respond with positive feelings to gentle care (Draper & Draper, 1975).

When preparing the room for bathing the baby, avoid drafts or breezes by closing doors and windows wherever necessary. Keep the room temperature between 75° and 80° F. Cover the floor area with newspaper, an absorbent washable rug, or large towel. If a table or cabinet top will be used when the baby is taken out of the bath water, cover the top with a heavy terry cloth towel or pad. A tray with the soap, lotion, oil, powder, cotton swabs, and other toilet articles is very useful. A wastebasket and diaper supply should also be nearby (Draper & Draper, 1975).

An infant's bath tub, a large clean dishpan, or small tub may be used for the bath. Fill the tub two-thirds full of water at 100° to 105° F. Check the temperature with your elbow. The water should be warm to the touch. Place a folded cloth diaper or towel under the tub to prevent sliding (Draper & Draper, 1975).

When giving a tub bath, lift the baby onto a large towel, supporting the back and neck continuously. Use a towel to keep the baby warm after removing all of the clothing.

Using a squeezed-out washcloth, wash the face, eyes, and ears. Use gentle motions. Cleanse the nose with a cotton swab and follow with an application of baby oil if needed to prevent drying skin. The eyes may be wiped gently with fresh cotton or a soft corner of the washcloth. In wiping mucus from the eyes, stroke from the inner corner toward the nose. Except in the diaper area, soap is not usually necessary when the baby is very young because the skin is quite sensitive (Draper & Draper, 1975).

Another method can also be used to hold the infant. Carefully slip one arm under the baby's neck and clasp your hand around the baby's shoulder with thumb on top and fingers under the armpit. With your other hand under the buttocks, lift slowly and place the baby gently into the water. Keeping the shoulder hold, use your other hand to wash the body (Draper & Draper, 1975).

To cleanse the genitals of a male child, use small swabs of cotton moistened in oil. Wipe off the excess oil. For a female child, gently wipe the genital area with a washcloth. Cleanse from front to back to avoid bringing feces from the anal area into the vagina. Clean the folds

of the vulva as well (Draper & Draper, 1975).

Infants need only one or two shampoos weekly. Use a baby shampoo or mild soap. Hold the baby's face up and tuck the child under your arm, holding the infant against your body. This is sometimes referred to as "the football hold." Support the baby's back with your forearm. Placing the baby's head in your hand will give a safe and secure hold (Draper & Draper, 1975).

Lather the hair and rinse with the baby's head tilted downward to prevent water from running into the eyes. Talking gently or singing to the baby during this process gives the baby reassurance of safety (Draper & Draper, 1975).

After shampooing, place the baby in the tub, holding the body with one hand under the back and buttocks while supporting the head with your arm. Soap the baby with your free hand and rinse.

Carefully lift the baby out of the tub, supporting the head and back, and place the child on a towel. Blot the baby dry--do not rub, and then gently massage with a small amount of baby lotion or powder. Always sprinkle powder on your hand, not directly on the baby; this will prevent inhalation of the powder. Fold the towel over the baby for warmth (Draper & Draper, 1975).

For the very young infant, a sponge bath will be adequate until the navel and/or circumcision is healed completely. The sponge bath is less startling for the baby than a tub bath, and also, caretakers will feel more confident if bathing children is a new experience for them. Expose only one area of the baby's body at a time when sponge bathing. Wash and dry each area before proceeding to the next. Start with the face and finish with the diaper area (Draper & Draper, 1975).

As babies become familiar with the bathing process, they will feel more secure. Physical activity will turn the bath into play. Splattering and slapping the water and playing with floating toys are part of learning and exploring (Draper & Draper, 1975).

With a baby around, diapers are a big part of the daily routine. As the baby is cared for many hours will be spent putting on and taking off diapers, often as many as ten changes a day (Draper & Draper, 1975).

Diaper infants before and after feeding, before they are put to bed, and whenever they seem uncomfortable because they are wet. Infants' sleep should never be disturbed in order to diaper them, nor should they be diapered when they are hungry and crying for their bottles (Conger & Rose, 1979).

The diaper is the most important item of clothing for a young baby. Diapers are available in different materials and different sizes. The largest size, twenty by forty inches, is the most frequently used. Some of the materials from which diapers are made are gauze, bird's-eye, and flannel. Bird's eye is more absorbent than gauze and is less bulky than

cotton flannel. Gauze dries quickly, but is less absorbent than the other materials (Home Economics, 1977).

A convenient alternative to cloth diapers is the disposable diaper. Disposable diapers are handy for trips and at especially busy times. Some mothers use them all of the time, even though they are more expensive than cloth diapers and add to the ever-increasing quantity of waste produced each day (Draper & Draper, 1975).

When diapering an infant, you should do the following:

1. Collect the things you will need--a clean, folded diaper; a clean soft washcloth rinsed out in lukewarm water; baby oil or lotion; talcum powder; and a toy for the infant to hold.
2. Wash your hands thoroughly.
3. Gently place the infant in a safe position on a washable surface. This may be a changing table or the infant's crib.
4. Speak softly to the infant as you remove the diaper pins or plastic strips. Put open safety pins in a bar of soap, not in your mouth, on your clothing, or on the changing surface.
5. When changing an infant after a bowel movement, wipe the baby with the clean part of the dirty diaper. The diaper should be put on a surface that can be disinfected, and it should be removed after you have finished putting the clean diaper on the baby. The infant should never be left alone while you remove the dirty diaper.
6. Sponge off the infant's buttocks with a washcloth which was wrung out in warm water. Talk to the infant while you work. Separate the folds of skin around the infant's genitals, cleansing and removing any urine, bowel movement, or old powder.
7. Dry the area you have washed, using a gentle patting motion, and apply lotion or oil.
8. Lift the infant by holding the ankles securely and high enough to place the folded diaper beneath the baby's buttocks.
9. When pinning a diaper, place your fingers between the pin and the infant's body so that the pin does not accidentally poke the infant's skin.
10. If a disposable diaper is used, be sure the plastic strips on the sides are not pulled too tightly across the infant's tummy. Diapers should be snug, but not tight or binding.
11. Smile at the infant and talk about the sweet, clean smell.
12. Put the infant in a clean crib or play pen while you remove all

dirty items and disinfect the surface where the diapering took place.

13. If the diaper contains a bowel movement, flush the waste down the toilet.
14. Wash your hands after rinsing out the soiled diaper and placing it in a diaper pail (if a cloth diaper was used) or in a waste receptacle (if a disposable diaper was used) (Conger & Rose, 1979).

Wet diapers should be stored in a covered pail until wash time. Fill the pail with a mixture of water and a small amount of borax or vinegar (Draper & Draper, 1975).

Diaper rash, which is caused by bacteria, is a problem for many babies. Keep the baby's diaper area clean and wash the diapers in a sanitary manner. Rubber or plastic pants can also aggravate a diaper rash because they hold in moisture. If the rash is severe, medication may be needed. A doctor's assistance should be sought if a serious rash develops in the diaper area or elsewhere.

Elimination is a basic need of infants and toddlers. In infants it is a reflex action. Toilet training cannot be started in toddlers until the central nervous system has matured (Papalia & Olds, 1975). The child must learn that there is a proper time and place to eliminate, must recognize the feelings that indicate the need to eliminate, and master the process of tightening the sphincter muscles to inhibit, or loosen them to permit elimination (Papalia & Olds, 1975).

At about eighteen months, the child usually matures sufficiently for adults to consider toilet training (Hildebrand, 1975). However, many children do not respond to training at this early age, and parents should understand that this is normal and not attempt to force the child. Complete toilet training is usually not accomplished before the child is two and one-half years old (Mussen, Conger, & Kagan, 1979). Papalia & Olds (1975) state that generally, the later toilet training is begun, the faster the child learns. Studies reported show that girls achieved dryness earlier than boys, possibly because of maturation. Low-birth-weight children had more difficulty attaining bladder control than children of normal birth weight (Papalia & Olds, 1975).

Toddlers need help to become self-directing in the matter of elimination. Toilets should be low and small, or a potty should be used to help the child feel secure and safe. Being in the bathroom when others use the toilet may help the child to understand the reason for the toilet or potty. If the child cannot use the toilet after a short stay, the diaper should be reattached and attempts should be made at a later time when more positive signs appear in the child. If resistance to being placed on the toilet is shown by the child, the care giver should forget the procedure until a later date. When a child does successfully use the bathroom, praise should be given (Hildebrand, 1975).

REFERENCES

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- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1975.
- Hildebrand, V. Guiding young children. New York: McMillan, 1975.
- Home Economics Instructional Materials Center. Child care aids. Lubbock, Texas: Author, 1977.
- Mussen, P. H., Conger, J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.
- Papalia, D. E., & Olds, S. W. A child's world. New York: McGraw-Hill, 1975.

SUGGESTED READINGS

- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1975.

This is a well written text on child development. The book has a special appendix entitled "Schedules and Routines for Children's Activities." For upper level high school students.

- Hildebrand, V. Guiding young children. New York: McMillan, 1975.

A thorough text on child development written for adults or out-of-school youth.

- Mussen, P. H., Conger, J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.

A current book on all aspects of child development, written for college students and teachers. This text covers child development from the prenatal period through adolescence.

LEARNING ACTIVITIES

1. Title: Bathing Demonstration

Description: Present the following activities:

- I. Discuss how to prepare the room for bath
- II. Demonstrate sponge bath for very young infant
- III. Demonstrate tub bath

Materials Needed: Doll, towels, soap, baby shampoo, wash cloth, Q-Tips, cotton balls, lotion, oil, powder, infant's bath tub, or kitchen sink

2. Title: Diapering Demonstration

Description: Demonstrate the steps involved in diapering a baby.

Materials Needed: Doll, diaper, washcloth, oil or lotion, powder, toy for infant to play with

3. Title: Price Survey

Description: Compare the costs of various types of cloth and disposable diapers. Also find out how a diaper service compares in price. Question some mothers on their preferences. Decide on the 1) most economical, 2) most time-saving, and 3) most comfortable for the baby.

Materials Needed: None

4. Title: Word Search Game

Description: Complete the "Baby Care Word Search Game" (Student Handout #13).

Key: Word Search

p o w d e r t i m e w s f a c e
r i t p h a n d j i g h o b m e
a d n a n k l e s w u a i o a y
s c o t t o n s w a b m e r t g
h i s p o n g e d l s p p a u y
e r e y m n t w e b l o t x r z
f l a n n e l e t f o o g i e d
e f i n g e r s n b c j t f j j

- | | |
|----------------|-------------|
| 1. powder | 9. flannel |
| 2. cotton swab | 10. time |
| 3. nose | 11. ankles |
| 4. shampoo | 12. fingers |
| 5. blot | 13. borax |
| 6. hand | 14. rash |
| 7. sponge | 15. mature |
| 8. face | |

Materials Needed: Copies of game

INSTRUCTIONAL AID

Title: Poster

Description: Johnson and Johnson has an excellent poster on "How to Bathe Your Baby." It shows how to give a sponge bath and a tub bath.

Materials Needed: Copy of poster

Source: Poster available from Johnson and Johnson, 220 Centennial Avenue, Piscataway, New Jersey 08854.

EVALUATION

Title: Post-test

Description: The following questions can be used as a post-test.

Write "true" if the statement is true and "false" if the statement is false.

1. True Soiled diapers are usually stored in a container partially filled with water and a soaking product. (*borax or vinegar*)
2. True Diaper rash is sometimes aggravated by waterproof pants.
3. False At about twelve months, the child usually matures sufficiently for adults to consider toilet training. (*about eighteen months*)
4. False Studies indicate that boys achieve dryness earlier than girls. (*the opposite is true*)
5. True After a bath, blot the baby dry.
6. False Check bath water temperature with your hand. (*elbow*)
7. True In wiping mucus from the eyes, stroke from the inner corner toward the nose.
8. False Even when the baby is very young, his body should be soaped daily with baby soap. (*only the diaper area*)
9. False Sprinkle powder directly on the baby to prevent contamination. (*always on your hand, not directly on the baby; this will prevent inhalation of the powder*)
10. True For the very young infant, a sponge bath will be adequate until the navel and/or circumcision is/are healed completely.

Complete the statements below by writing the correct word in the blank.

1. Expose one area(s) of the baby's body at a time when sponge bathing. (*How Many*)
2. When bathing an infant, start with the facial area and end with the diaper area.
3. Sometimes, diapers must be changed as many as ten times a day.
4. A convenient alternative to cloth diapers is the disposable diaper.

Baby Care Word Search Game
Student Handout #13

P O W D E R T I M E W S F A C E
R I T P H A N D J I G H O B M E
A D N A N K L E S W U A I O A Y
S C O T T O N S W A B M E R T G
H I S P O N G E D L S P P A U Y
E R E Y M N T W E B L O T X R Z
F L A N N E L E T F O O G I E D
E F I N G E R S N B C J T F J J

1. Before beginning an infant's bath, gather all necessary supplies such as washcloth, soft towel, lotion, or _____.
2. Cleanse the baby's nose with a _____.
3. In wiping mucus from the baby's eyes, stroke from the inner corner toward the _____.
4. When washing the baby's hair, tilt the baby's head so that _____ does not get in his/her eyes.
5. _____ the baby dry - do not rub.
6. If powder is used, always sprinkle the powder on your _____, not directly on the baby.
7. For the very young baby, a _____ bath will be adequate.
8. When bathing a baby, start with the _____ and finish with the diaper area.
9. Three common diaper materials are gauze, birdseye, and _____.
10. Disposable diapers save _____ and work for the care giver but also are expensive.
11. To change a diaper, lift the infant by holding the _____ securely and high enough to place the diaper under the baby.
12. When pinning the diaper, place your _____ between the pin and the infant's body.
13. Wet diapers should be stored in a covered pail containing a mixture of _____ or vinegar, and water.
14. To avoid diaper _____, keep the baby's diaper area clean and avoid the use of plastic pants.
15. Toilet training will not be successful until the individual child is _____ enough physically.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Physical Needs: Rest and Sleep

GENERALIZATIONS

1. During the first year, the pattern of sleep changes from sleeping eighty percent of a day for newborns to sleeping mostly at night for a one-year-old.
2. Some infants sleep more than others.
3. Managing naptime, bedtime, and sleeping behavior requires a combination of firmness and flexibility.
4. Bedtime may be postponed as the child grows older.
5. Each individual is different, and often only prolonged trial and error can lead to an effective solution to a sleep problem.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Analyze the time span required for meeting a baby's sleep needs.
2. Discuss one way in which sleeping differs from other routines.
3. Identify how the general pattern of sleeping behavior changes with age.
4. List two reasons why bedtime comes later as children grow older.
5. Describe three ways by which parents can manage a child's bedtime.
6. Name four reasons why flexibility is important in determining sleeping patterns for children.

OUTLINE

- I. Infant Sleep Needs
 - A. Importance of Proper Amount of Sleep
Infant sleep pattern
 - B. Setting Conditions for Sleep
- II. Sleeping Problems in Infancy
- III. Sleeping Problems of Toddlers

REVIEW OF SELECTED LITERATURE

The effects of a lack of sleep are seen in children just as in adults. No sleep for even a short period of time seems to be related to illness. Children who regularly get an insufficient amount of sleep tend to be nervous and tired and are unable to function at their best (Ames, 1979).

Children vary greatly in the need for sleep, and individual requirements vary from time to time. A baby regulates its own need for sleep. Neonates (newborns) spend eighty percent of the time asleep while one year olds, on the average, are awake as much as they sleep (Mussen, Conger, & Kagan, 1979). Usually, a newborn sleeps sixteen to seventeen hours a day in short naps of four to five hours. Between one and three months, this time decreases to about fifteen hours per day, and the sleep periods gradually lengthen. By the time the child is one year old, he or she will sleep approximately eight to ten hours at night and will take one or two daytime naps of from one to three hours each. The infant can stay awake for increasingly longer periods of time as the months pass (Terry, Sorrentino, & Flatter, 1979). At two months, many babies will sleep through the night. Up to the age of one year, babies require two or three daytime naps. During the second and third years, the child usually continues afternoon naps. Factors influencing the quality and quantity of children's sleep in early months of life include colic, wetness, bodily discomfort, noise, and emotional disorders caused by violence or excessive excitement (Mussen et al., 1979).

The proper atmosphere for sleep is important. A baby should have its own bed that provides enough area to move around and sufficient support for the body. The temperature of the room should be between seventy and seventy-two degrees, winter or summer. Fresh air should be provided, but should not cause a draft over the baby's bed. Lighting should be low and shaded. Noise should be subdued by closing the door to the baby's room and lowering any artificial noises, such as radios and record players (Brisbane & Riker, 1971).

Preparing the child for bed may help the child to sleep. Babies and toddlers should be washed, their diapers changed, and clothes changed to nighttime garments. This routine helps even at nap time. Play should be relaxed, not vigorous, just before bedtime. The light should be turned out, and the child left alone.

Children should have a sleep routine. Regular sleep times are important. Once a sleep routine is established, it should be adhered to every day. Research shows that the child who goes to bed later than usual does not make up for his lost rest by sleeping later in the morning (Brisbane & Riker, 1971). A lack of consistency and firmness on the part of the parent increases bedtime problems. Some of the problems could possibly occur anyway, but many are aggravated by needless tension and worry experienced by the parent. Parents and care givers should realize that children go through stages that are not real problems (Hurlock, 1978).

Some sleeping problems experienced by infants are (1) waking before the usual time because of colic or gas pains, (2) crying when put to bed because of not being sleepy or because of distractions in the environment, (3) resistance to naps because of distractions in the house from TV,

guests, or older children playing, and (4) trying to get out of the crib before the parents get up and are ready to take the baby out (Hurlock, 1978).

As the baby grows older, other sleep and bedtime problems may occur. Some children refuse to sleep in any bed other than their own, and some children refuse to sleep in any bed, their own included. Around twenty-one months of age, some toddlers won't go to sleep alone. Waking in the middle of the night and getting out of bed is not an uncommon occurrence for a three-year-old. The toddler may develop a fear of the dark. Calling parents for extra attention as soon as the child is put to bed is a common bedtime problem. Patience and understanding on the part of the parents or care giver can help to minimize or prevent most of these bedtime problems (Ames, 1979; Hurlock, 1978).

REFERENCES

- Ames, L. B. Child growth and development. Philadelphia: J. B. Lippincott, 1979.
- Brisbane, H. E., & Riker, A. P. The developing child. Peoria, Illinois: Charles A. Bennett, 1971.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- Mussen, P. H., Conger, J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.
- Terry, S. G., Sorrentina, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

SUGGESTED READINGS

- Ames, L. B. Child growth and development. Philadelphia: J. B. Lippincott, 1979.

This book includes easy-to-read discussion of common bedtime problems together with solutions.

- Brisbane, H. E., & Riker, A. P. The developing child. Peoria, Illinois: Charles A. Bennett, 1971.

A very comprehensive book about the child from the prenatal period through twelve years of age. The book contains a special section on three special areas of study: "Racial Characteristics," "Health and Safety," and "Looking Toward Adulthood." A good high school text.

- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

A simply written text for low or medium level readers covering thoroughly the development of the child from the prenatal stage to six years of age.

Mussen, P. H., Conger, J., & Kagan, J. Child development and personality. New York: Harper & Row, 1979.

A current book on all aspects of child development, written for college students and teachers. This text covers child development from the prenatal period through adolescence.

Peterson, C. C. A child grows up. New York: Alfred Publishing Co., 1974.

A psychologist's detailed view of how children grow up. The book incorporates a day-by-day record or diary of the actual growth and development of the author. The diary was written by the author's father. High level readers in high school could use this book; however, the teacher would find it more useful.

Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

A simply written text for young or low level readers. Information is complete, but not discussed at length. Interesting to students.

LEARNING ACTIVITIES

1. Title: Group Presentation

Description: Select a group of students to do a presentation for the rest of the class. The presentation should include quiet activities that would be appropriate for a child right before bedtime. Finger plays, stories, and music could be included.

Materials Needed: Books about finger plays, games, etc.

2. Title: Discussion

Description: Share experiences, either as a child, or as a babysitter, about sleep problems and possible solutions. Experiences might include a child refusing to sleep in his/her own bed, refusing to sleep in any bed, not wanting to sleep alone, waking often during the night, or fear of the dark.

Materials Needed: None

3. Title: Crossword Puzzle

Description: Complete "Sandman Puzzle" (Student Handout #14).

Key:

Across

Down

2. Support
3. Blanket
7. Colic
10. Distractions
12. Temperature
13. Play

1. Lullaby
4. Night light
5. Time
6. Consistency
8. Washed
9. Draft
11. Sleep

Materials Needed: Copies of puzzle

INSTRUCTIONAL AID

Title: Transparency

Description: Use a transparency entitled, "Bedtime Does Not Have To Be Problem Time" (Figure #25) for discussion on making bedtime more pleasant.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Quiz

Description: The following multiple choice quiz can be used to evaluate the student's knowledge.

Choose the correct answer from the choices A, B, or C. Place the letter of the correct answer in the blank to the left of the statement.

B 1. The infant or toddler who loses sleep for even a short period of time may

- A. make it up on his next nap.
- B. show signs of illness.
- C. not even miss it.

C 2. Newborns may spend as much as

- A. 50% of the time asleep.
- B. 25% of the time asleep.
- C. 80% of the time asleep.

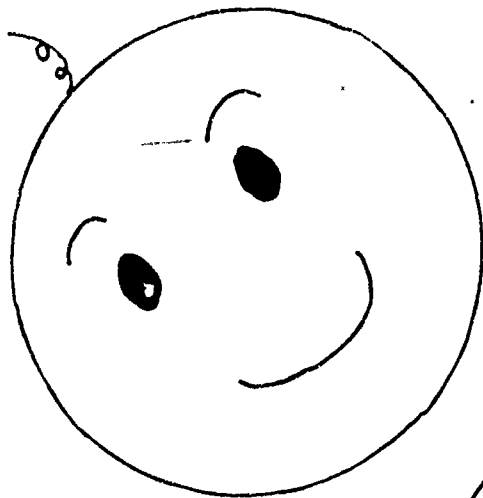
A 3. Most babies can be expected to sleep through the night at

- A. two months.
- B. two weeks.
- C. six months.

- A 4. The toddler may continue afternoon rests even during the
- A. second and third years.
 - B. third and fourth years.
 - C. fourth and fifth years.
- C 5. The atmosphere for sleep is important, including the temperature, which should be
- A. 80 to 85 degrees.
 - B. warm so that the baby will not catch cold.
 - C. 70 to 72 degrees.
- B 6. Artificial noise near the baby's room should
- A. get the baby used to family noises.
 - B. be lowered.
 - C. be raised.
- A 7. Play should be
- A. relaxed before bedtime.
 - B. vigorous before bedtime.
 - C. forbidden before bedtime.
- C 8. Toddlers will be more prepared for sleep if they have
- A. had a bath before bedtime.
 - B. had a quiet story read to them.
 - C. had both of the above.
- C 9. The toddler who is afraid of the dark can overcome this fear if
- A. made to go to his/her room before dark.
 - B. allowed to leave the light on all night.
 - C. parents accompany him/her into a dark room on several occasions.
- C 10. Some sleeping problems during infancy are
- A. colic or gas; and crying, because of not being sleepy.
 - B. trying to get out of crib because of waking up before parents; and distractions.
 - C. all of the above.

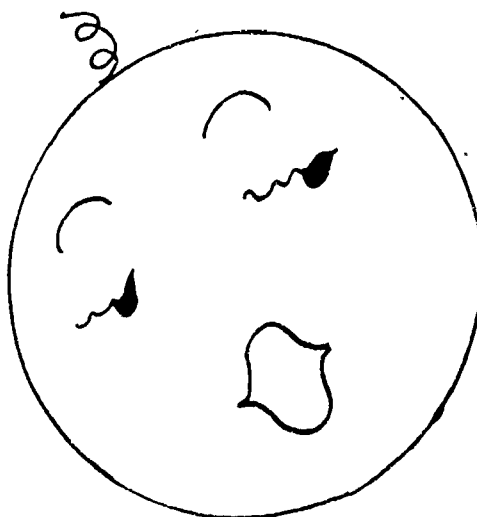
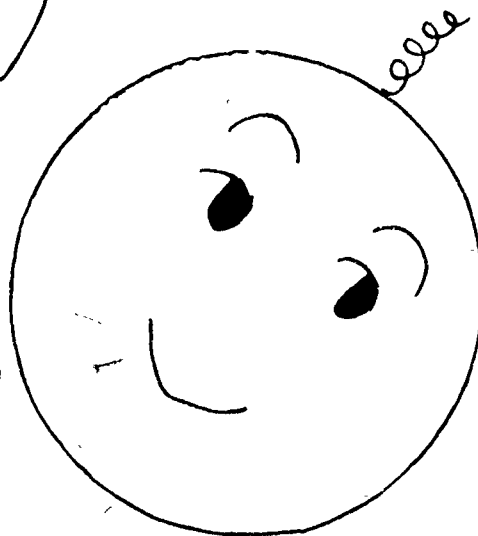
Materials Needed: Copies of quiz

Figure #25



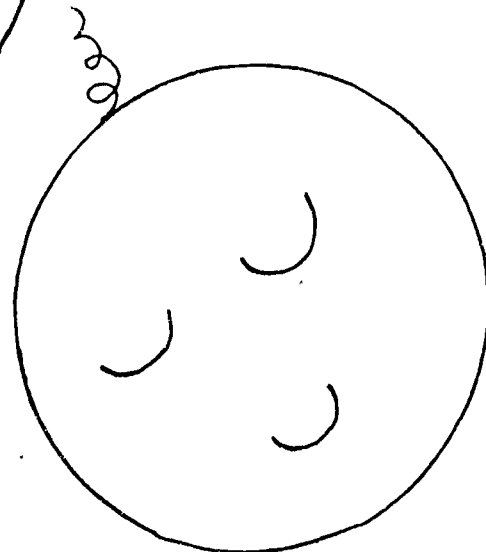
BEDTIME DOES NOT HAVE TO BE
PROBLEM TIME.

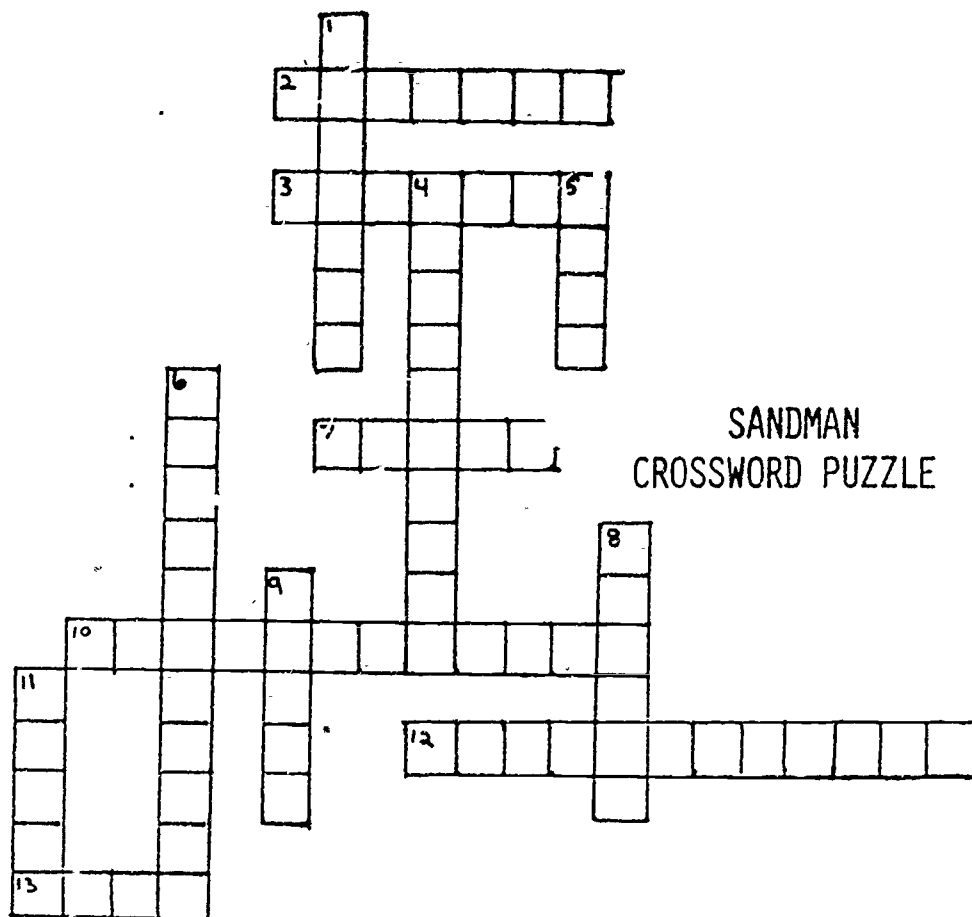
1. PROVIDE A COMFORTABLE ENVIRONMENT.
2. FOLLOW A ROUTINE.



3. AVOID STIMULATING PLAY BEFORE BEDTIME.

4. CALM ANY FEARS THE CHILD MIGHT HAVE.
5. AVOID DISTRACTIONS SUCH AS TELEVISION OR OTHER CHILDREN.





SANDMAN
CROSSWORD PUZZLE

Across

2. An infant's mattress should be firm enough to prevent smothering and to give adequate _____ for a baby's soft bones.
3. A favorite toy, doll, or _____ in the bed may comfort a frightened child.
7. _____ will disturb a child's sleep.
10. _____, such as TV or other children, will sometime cause a child to resist sleep.
12. The _____ of a baby's room should be about 70 degrees.
13. _____ should be relaxed, not stimulating, before bedtime.

Down

1. A _____ is a quiet song before bedtime.
4. A _____ may help a child who is fearful of the dark.
5. Newborns spend 80% of their _____ asleep.
6. A lack of _____ on the part of the parents increases bedtime problems.
8. Babies should be _____ and changed before bedtime.
9. Fresh air should be provided in a baby's room, but there should not be a _____ over the bed.
11. No _____, even for a short period of time, tends to make children cranky and nervous.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Health Care

GENERALIZATIONS

1. Children depend on adults to provide them with a safe and healthful place to live.
2. It is important for a young child to receive professional medical care and immunizations.
3. There are physical changes and changes in infant's behavior that indicate illness.
4. Accidents, disease, birth defects and injuries are common causes of disabilities and handicaps.
5. Parents of children with special problems often need help in understanding their children's specific needs and support in bearing the burden of the problems.
6. A person who cares for young children should be familiar with basic first aid procedures and accident prevention measures.
7. Early dental care may help prevent dental problems in a older child.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Discuss the importance of providing professional medical care for a young child.
2. Identify changes in an infant's behavior that would indicate the child is ill.
3. Explain why immunizations are important.
4. Define "handicap" and list four causes of disabilities.
5. Describe two important aspects of accident prevention.
6. Define "first aid" and describe behavior that should be observed in emergencies.
7. Discuss the importance of good dental care and outline a program of dental care for a child from infancy through early childhood.

OUTLINE

- I. Medical Care
 - A. Types of Medical Care
 - B. Indications of Illness
 - C. Immunizations
 - D. Special Children
- II. Accident Prevention
- III. First Aid
- IV. Dental Care

REVIEW OF SELECTED LITERATURE

Health care of the infant and toddler includes medical care, immunizations, dental care, first aid procedures, and accident prevention. Young children are dependent on adults for this care, thus it is important for care givers to be aware of the health needs of children.

There are two types of medical care available for children: preventive medicine and acute care medicine. Both are important to the overall health care of the child. Routine medical examinations or "well child check-ups" give the physicians a chance to monitor health regularly so that changes in health conditions can be evaluated in an informal manner. During a regular physical examination, the physician should be able to diagnose any infections, weaknesses, or malfunctions present in the child's body. Parents (or an adult) should be present for the child's check-up. Not only will the child be more relaxed, but the physician can provide the necessary information directly to the adult. The care giver can also provide the doctor with useful, pertinent information (Seefeldt, 1974).

Changes in an infant's or child's behavior may indicate illness. Conger and Rose (1979) identify several signs for which a care giver should watch including the following:

1. Child is cross though usually happy and playful.
2. Awakens often and cries though usually sleeps well.
3. Becomes sleepy and loses interest when he or she is usually playful and active.
4. Has hot, dry skin with little color or a fever.
5. Has a stiff neck.
6. Pulls at one or both ears.
7. Vomits (remember all babies will spit up at times).
8. Has bowel movements that are loose and watery, change color, increase in number, or are very hard.

9. Cries as though in pain.
10. Breaks out in a rash.
11. Twitches in the arms, legs, or face.

Many childhood illnesses are communicable, and parents should consult the physician before allowing a child to return to a day care center or school (Conger & Rose, 1979).

Immunization programs have decreased the threat of childhood illnesses in the United States. It is necessary for parents or care givers to be informed about needed immunizations and see that the child receives the proper vaccine at the proper time. The common immunizations are against diphtheria, tetanus, whooping cough, polio, measles, rubella, and mumps. Immunizations are available from the child's physician or from the local public health unit. Most states have a public health system whereby all children can receive immunization at no cost. Only through regular immunization can childhood illnesses be kept under control (Reinish & Minear, 1978).

There are many young children who have special health problems or handicaps. A handicap is a condition that prevents a person from functioning according to the demands of his or her environment. The disability may be physical, mental, emotional, or any combination of these. Accidents, disease, birth defects, and injuries are common causes of disabilities (Ames, 1979; Terry, Sorrentino, & Flatter, 1979).

Parents of children with special problems often need help in understanding their children's specific needs, and support in bearing the burden of the problems. They often seek medical aid and are willing to give up a great many things in order to pay for treatment that may correct or lessen the severity of the handicap. Informed parents are able to teach and encourage their child to do as much as the handicap will allow, without showing concern or pity because the child is handicapped (Hurlock, 1978). Expanding knowledge about fetal development and the cause of birth defects emphasizes the importance of the mother's health and of prenatal care. Both can help prevent many disabilities.

Children depend greatly upon adults to prevent accidents and provide safe environments. Because a baby cannot detect danger, harmful objects should be kept out of sight and reach. Even when an area has been made as safe as possible, a young child should not be left unattended. The presence and attention of the care giver is an important aspect of accident prevention.

Even when adults are diligent about accident prevention and safety, they should be familiar with first-aid procedures. According to the American Red Cross (1973), "First aid is the immediate and temporary care given a victim of an accident or sudden illness until the services of a physician can be obtained." The following steps should be observed in handling emergencies:

1. Remain calm; do not panic.
2. Before taking action, observe the situation quickly but carefully.

3. If a child needs immediate attention, give only necessary help according to prescribed methods.
4. Call an ambulance or doctor if necessary.
5. Stay close to the child until help arrives.
6. As soon as the child is attended, notify the child's parent or guardian.

Dental health is an important aspect of the overall health of the infant and toddler, and early dental care should prevent many dental problems in later childhood. Children's teeth begin forming early during the fetal stage, and the mother's diet provides the essential nutrients (calcium, phosphorus, vitamins C and D, and fluoride) for tooth development (Pantell, Fries & Vickery, 1977).

Most children begin teething actions several months before the eruption of the first tooth. The first tooth usually appears on the lower jaw and is one of the front teeth, known as incisors. These incisors appear in most children by the age of eight months, but may begin as early as four months or as late as thirteen months. Usually, the two lower central incisors come first, followed by the four upper incisors. Many children will have these six teeth in place shortly after their first birthday. The next teeth, appearing between eighteen and twenty-four months, are the first four molars and the remaining two bottom incisors.

Teething is important and necessary, and can be done on almost any hard rubber object. Parents should be careful about allowing children to teethe on objects that could break or splinter resulting in injuries.

Major tooth problems may be caused by allowing an infant to fall asleep with a bottle of milk in the mouth. The milk remains in constant contact with the teeth, providing an ideal setup for tooth decay. Studies have shown that children who lie flat in bed with a bottle in their mouths drain some milk into their Eustacian tubes and consequently experience a higher incidence of ear infections (Pantell et al., 1977).

Brushing a child's teeth should begin when the child is able to hold the toothbrush and make an attempt at brushing. Most children will enjoy brushing their teeth with an adult during the imitative years. A two year old will not be very proficient at brushing teeth and will need help. However, by the age of three and one-half, children should have acquired the fine skills necessary for doing a good job by themselves. Parents can help by encouraging brushing as a family activity and regarding tooth care as a pleasurable experience and not a chore (Pantell et al., 1977). Early dental and health care is important, and children should be taught this value as early as possible.

Flossing is not recommended for children with their first teeth, as it can be an unpleasant experience. Unless an adult is extremely careful,

the tender gums of a child may be injured during this process. Also a very young child may be frightened by the noise of a water jet, such as a water-pick, which may also be used for cleaning the teeth (Pantell et al., 1977).

The time for the first dental examination should be about the child's third birthday. This is approximately one year after all of the primary teeth have erupted. Almost half of the children at this age will already have at least one cavity started. Visits to the dentist should be made on a routine basis. Once every six months is sufficient for most children.

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- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

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- An excellent handbook on child care, emphasizing child safety.
- American Red Cross. Standard first aid and personal safety. Garden City, New York: Doubleday, 1973.
- A thorough and complete text on first aid and safety. A must for people who work with children.

Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

A well-written text for high school students containing information on the child from the prenatal stages through the early school years. A special discussion on crib death and the handicapped children is included.

Department of Health, Education and Welfare, Office of Child Development. Day care: Health services. Washington, D. C.: U.S. Government, 1971.

A good text on day care including health and safety of young children.

Fruchter, D., & Higginson, G. M. The TATTLETOOTH dental program, evaluation report. Austin, Texas: Educational Development Corp., August, 1976.

The TATTLETOOTH program is a new dental health curriculum in which students learn in the classroom to care for their teeth. Separate lesson plan kits have been developed for kindergarten to senior high school. The program is designed to help alleviate the students' physical, psychological, and social problems associated with dental disease.

LEARNING ACTIVITIES

1. Title: Field Trip

Description: Visit the office of a children's dentist and find out what practices help prevent dental problems from occurring later in life.

Materials Needed: Permission of principal, arrangements with dentist, transportation arrangements, permission slips for students, thank you letter.

2. Title: Research Project

Description: Sudden Infant Death Syndrome or Crib Death is a problem of special concern to parents and the medical profession. Research recent information on Sudden Infant Death Syndrome. Develop a file of magazine articles, pamphlets, and newspaper clippings on current information.

Materials Needed: Articles and pamphlets

3. Title: Reports

Description: Write a report on a disease that affects children such as sickle-cell anemia, cystic fibrosis, Tay-Sachs disease, Down's

syndrome, cerebral palsy, Rh disease, or a common communicable childhood disease.

Materials Needed: Library facilities

4. Title: Guest Speaker

Description: Invite a nurse to speak on Sudden Infant Death Syndrome. Ask if a monitor that warns parents when a child stops breathing could be demonstrated.

Materials Needed: Letter confirming date and time, thank you letter

5. Title: Field Trip

Description: Visit a center for retarded or handicapped young children. Note the tasks that children can do or learn, not what they cannot do.

Materials Needed: Arrangements with center, permission form principal, transportation arrangements, permission slips, thank you letter

6. Title: Guest Speaker

Description: Invite the school nurse or a first aid instructor to speak on basic first aid techniques and rescue breathing techniques that could be used on infants and toddlers.

Materials Needed: Letter confirming time and date, thank you letter

7. Title: Demonstrations

Description: Select one of the following first aid problems. Describe and demonstrate first aid procedures to the class.

- | | |
|------------------------------|---|
| 1. Broken bone/fractures | 6. Poison (general) |
| 2. Minor burns | 7. Animal bite |
| 3. Cuts and scrapes | 8. Unusual reactions to bites or stings |
| 4. Object in the nose or ear | 9. Fainting or Shock |
| 5. Particle in the eye | |

Materials Needed: First Aid Manuals

8. Title: Making a First Aid Kit

Description: Make a first aid kit for home or to take with your other babysitting supplies. Decide on what needs to be included.

Materials Needed: Suggested supplies--first aid oock, soap, safety pin, scissors, calamine lotion, tweezers, needle, adhesive tape, sterile dressings, rubbing alcohol, clean cloth, emergency phone numbers. Students may think of others to include.

9. Title: Special Report

Description: Select one student to call a poison control center telephone number. Find out what information the center would need in order to help a poison victim. Report back to class.

Materials Needed: Telephone number of poison control center, pen, paper

10. Title: Home Assignment

Description: Using a thermometer, test the hot water at home. As a class, discuss the various temperatures recorded. Could a child be burned by hot water at home?

Materials Needed: Thermometers

11. Title: Class Discussion

Description: Discuss the following hazards and determine prevention measures. Keep in mind that prevention behavior might vary according to the age of the child.

1. Bath *Check temperature with elbow. Keep baby out of reach of faucets. Do not leave baby alone in bath for any reason. Always keep one hand on a very young baby.*
2. Smothering *Filmy plastics, harnesses, zipper bags, and pillows can smother or strangle. A firm mattress and loose covering for baby are safest.*
3. Falls *Never turn back on a baby who is on table or bed.*
4. Burns *Place guards around heaters and floor furnace. Keep hot liquids, hot foods, and electric cords on irons, toasters and coffee pots out of baby's reach. Use sturdy and round-edged furniture. Avoid hot-steam vaporizers. Never leave children alone in the house.*
5. Play areas *Fence the play yard. Provide sturdy toys with no small, removable parts and of unbreakable material. Electric cords to electrical appliances, radios, and televisions should be kept out of reach. Never leave child alone in wading pool, or around open or frozen water.*

6. Poisons, medicine *Store all medicines and poisons in locked cabinet. Store cosmetics and household products, especially caustics, out of reach of child. Store kerosene and gasoline in metal cans and out of reach of children.*

12. VOCABULARY

1. First aid--Immediate and temporary care given a victim of an accident or sudden illness until the services of a physician can be obtained.
2. Preventive medicine--Medical care designed to keep disease from occurring.
3. Acute-care medicine--Medical care for sick people.
4. Immunization--Usually a "shot" which gives the body the capacity to resist disease.
5. Communicable diseases--Those diseases that can be transferred from one person to another.
6. Disability--A condition that prevents a person from functioning according to the demands of his/her environment; can be physical, mental, emotional, or a combination of these.

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Make a transparency of the chart on "Childhood Diseases" (Figure #26). Fill in with a grease pencil as the topic is discussed in class. Copies could be made for students to fill in during discussion.

Materials Needed: Transparency materials, copies of chart, overhead projector, felt tip pen designed to write on transparencies (Vis-a-Vis pens)

2. Title: Bulletin Board

Description: Use "Train Yourself in First Aid" (Figure #27) when discussing general first aid techniques.

Materials Needed: Background, construction paper, markers

3. Title: Pamphlets

Description: Many pamphlets are available on this topic. These pamphlets are free and may be ordered from the address given below.

Source: (1) "Protecting Your Child"--Consumer Relations Department, The Dracket Co., 5020 Spring Grove Avenue, Cincinnati, Ohio 45232. (2) "Tips on Child Safety"--Closure Committee, Glass Container Manufacturers Institute, Inc., 1800 K. Street, N.W. Washington, D.C. 20006. (3) "It Hurts When They Cry," "Because You Care for Kids..."--U.S. Consumer Product Safety Commission, Washington, D.C. 20207.

EVALUATION

1. Title: Oral Evaluation

Description: Read each of the following situations, decide what is hazardous about the situation, and what can be done to prevent an accident.

1. The bath water may be too hot for the infant...
2. Mother has just placed Baby on dressing table and the telephone rings...
3. A young child in the neighborhood comes to visit the baby and brings a small rubber ball...
4. A plastic cleaning bag is left on the bed...
5. Mother is cutting out a dress to sew and the doorbell rings...
6. Mother and toddler are outside playing in a fenced yard and Mother has to go inside...
7. Mother is giving baby a bath and the telephone rings in the next room...
8. The family lives in an apartment on the second floor and Dad takes out the garbage and the toddler follows...
9. Dad is mowing the yard and leaves the plastic jug of gasoline on the patio...
10. The family just moved into a new home with a fireplace and the toddler is fascinated by the fire...

Materials Needed: None

2. Title: Written Evaluation

Description: Answer the following questions to evaluate student understanding.

Fill in the blanks with the correct answers.

Acute, Preventive 1. Two types of medical care.

Handicap 2. A condition that prevents a person from functioning according to the demands of his/her environment.

First Aid 3. Immediate and temporary care given to a victim of an accident or sudden illness until a doctor arrives.

Three 4. Age when children should have first dental exam.

Lower, front 5. The first teeth to erupt, usually.

6. Give two reasons that parents should remain with a child during physical examinations.

1. *To make the child feel more relaxed.*
2. *To give or receive necessary information about the child.*

7. Name two sources of childhood immunizations.

1. *Physician*
2. *Public health unit*

8. List five changes in behavior that might indicate illness in children.

- | | |
|------------------------------------|--|
| 1. <i>Is cross and cranky</i> | 7. <i>Vomits</i> |
| 2. <i>Doesn't sleep well</i> | 8. <i>Has a change in bowel movements</i> |
| 3. <i>Becomes sleepy easily</i> | 9. <i>Cries</i> |
| 4. <i>Has hot, dry skin; fever</i> | 10. <i>Breaks out in a rash</i> |
| 5. <i>Has a stiff neck</i> | 11. <i>Has twitches in the arms, legs, or face</i> |
| 6. <i>Pulls at ears</i> | |

9. Name two important aspects of accident prevention.

1. *Remove dangerous objects to make the area as safe as possible.*
2. *Do not leave a child unattended.*

10. Allowing an infant to fall asleep with a bottle in his/her mouth is an undesirable practice. Why?

The milk remains in contact with teeth, providing an ideal setup for tooth decay. Also the milk can drain into the eustacian tubes causing ear infections.

Materials Needed: Copies of questions

CHILDHOOD DISEASES

Figure #26

DISEASES	PREVENTION	SYMPTOMS	INCUBATION PERIOD	HOME CARE	HOW LONG CONTAGIOUS
CHICKEN POX	None. Immune after one attack.	Mild fever followed in 24 to 36 hours by small raised pimples which become filled with clear fluid. Scabs form later. Successive crops of pox appear.	2-3 Weeks	Not a serious disease; trim fingernails to prevent scratching; a paste of baking soda and water, or alcohol, may ease itching.	1-2 days before to 6 days after appearance of rash. Scabs are not infectious.
MEASLES (GERMAN/RUBELLA)	Vaccinate children 1 year to puberty (12 years of age).	Slight fever, mild cold symptoms or sore throat may precede tiny, rose-colored rash. Enlarged glands at back of neck and behind ears are usual.	2-3 Weeks	Not a serious disease; complications rare; give general good care, and rest is necessary. It is very important to keep child away from pregnant women.	Until rash fades. About 5 days after beginning of disease.

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CHILDHOOD DISEASES

Figure #26-Continued

DISEASES	PREVENTION	SYMPTOMS	INCUBATION PERIOD	HOME CARE	HOW LONG CONTAGIOUS
MEASLES (RED/RUBEOLA)	Immunize all children 10 months to 12 years of age who have not already had measles. Recommend immunization earlier than 10 months of age. Repeat pre-10 month immunization at 12-18 months.	Sore throat; red watery eyes; running nose; fever. Small red spots with white centers in mouth appear before rash. Red rash or blotches appear in 3 to 4 days. Eyes sensitive to light.	Usually 10 to 11 days.	May be mild or severe with complications of a serious nature; follow doctor's advice, as it is a most treacherous disease.	4 days before rash and 5 days after rash appears.
MUMPS	Immunize children prior to school entry, if recommended by your doctor.	Fever and nausea, followed by painful swelling of glands near ear and about the angle of the jaw. Other parts of body may be affected also.	12-26 days	Keep children in bed until fever subsides; indoors, unless weather is warm.	Until all swelling disappears.

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CHILDHOOD DISEASES

DISEASES	PREVENTION	SYMPTOMS	INCUBATION PERIOD	HOME CARE	HOW LONG CONTAGIOUS
ROSEOLA	None. Usually affects children from 6 months to 3 years of age.	High fever which drops before rash or large pink blotches covering whole body appear. Child may not seem very ill despite high fever (103°-105°F), but child may convulse.	About 2 weeks	No special measures, except rest and quiet.	Until child seems well.
STREP THROAT (SEPTIC SORE THROAT) AND SCARLET FEVER (STREP THROAT WITH RASH)	Antibiotics may prevent or lighten an attack.	Sometimes vomiting and fever before sudden and severe sore throat. If followed by fine rash on body and limbs it is called scarlet fever.	1-5 days	Usually less severe than formerly was; responds to antibiotics, which should be continued for full course to prevent serious complications.	7-10 days; when all abnormal discharge from nose, eyes, and throat has ceased.

Figure #26-Continued

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CHILDHOOD DISEASES

DISEASES	PREVENTION	SYMPTOMS	INCUBATION PERIOD	HOME CARE	HOW LONG CONTAGIOUS
WHOOPING COUGH (PERTUSSIS)	Immunize all children at 2 months of age. Usually given with immunization for diphtheria and tetanus (DPT).	At first seems like a bad cold with sneezing and dry cough. Changes at end of second week to spells of coughing accompanied by a "whoop."	7-21 days	Child needs careful supervision of physician throughout this taxing illness.	At least 4 weeks; exposed children should be kept at home if cold symptoms appear.

Figure #26-Continued

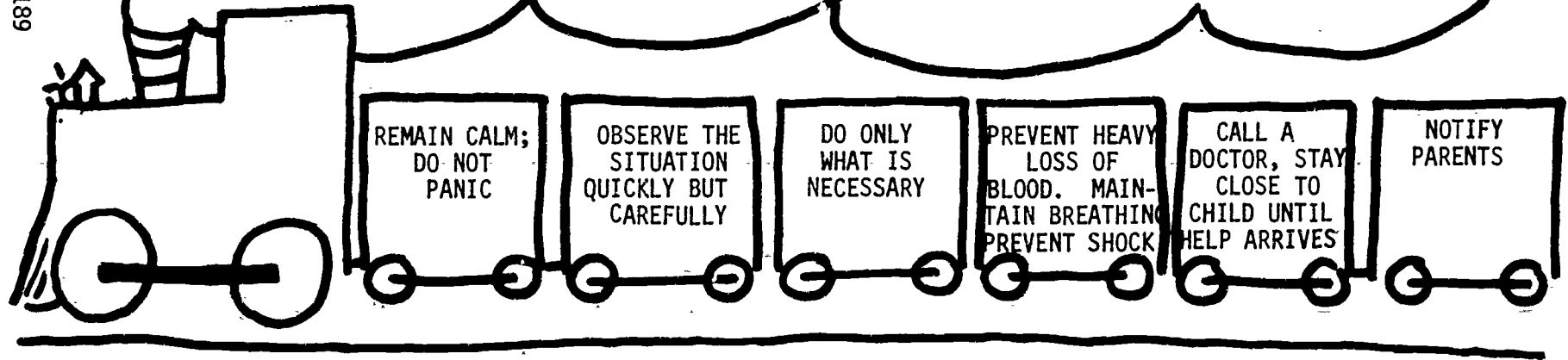
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TRAIN YOURSELF IN FIRST AID

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UNIT: Growth and Development of Infant and Toddler

CONCEPT: Motor Development

GENERALIZATIONS

1. Motor development occurs rapidly during the early years.
2. Motor development follows a predictable pattern and correlates closely with sensory development.
3. Motor development tasks are achieved in a sequence or order that can be easily seen.
4. Rates of motor development are not the same for every child.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define terms related to motor development.
2. Describe the pattern and direction of motor development in children from birth to three years of age.
3. Associate specific motor tasks with designated ages of children.
4. Explain how sensory abilities and motor development are related.

OUTLINE

I. Definition of Terms

- A. Motor Development
- B. Motor Ability
- C. Motor Coordination
- D. Gross Motor Control
- E. Fine Motor Control

II. Pattern of Motor Development

- A. Direction of Motor Development
- B. Order or Sequence of Motor Development
- C. Rates of Motor Development
- D. Relationships of Developmental Tasks to Motor Development

E. Motor Development During Infancy and Early Childhood

III. Coordination of the Senses and Motor Development

REVIEW OF SELECTED LITERATURE

Motor development is a broad term that describes the attainment and use of control over the movement of different parts of the body. Motor development is the voluntary body movement that results as nerves and muscles work together. Daily activities such as walking, dressing, and eating require motor ability. Motor coordination is the controlled and balanced movement of the body parts. Sitting, standing, walking, and jumping require motor coordination. As children learn to coordinate movements of the trunk, shoulders, arms, legs, and fingers, the development of the other motor skills follows. Gross motor control involves the use of muscles in the hands and fingers to perform such skills as eating with a spoon or manipulating small objects (Draper & Draper, 1979).

Just as physical growth proceeds from the head downward, so does control over muscles. At the age of one month, an infant who is placed stomach down on a flat surface can lift his/her head up at the shoulders. Control over neck, shoulder, and chest muscles precedes that of the trunk muscles. The trunk muscles, are in turn, more advanced developmentally than the leg muscles (Terry, Sorrentino, & Flatter, 1979).

Motor control develops from the center line of the body to the extremities. Babies develop the ability to use upper arm and leg muscles first, followed by the forearm and foreleg muscles, then the hand and feet muscles, and finally the finger and toe muscles. Almost all children progress in a definite order from simple motor activities to more complicated motor activities (Papalia & Olds, 1975).

The pattern of motor development begins with large muscle, or gross motor control, and progresses to small muscle, or fine motor control. Even very young infants demonstrate this sequence as they reach out, using the upper arm muscles, and reflexively grasp objects. This grasping is caused by involuntary control of muscles. The infant cannot unflex these muscles at will. Later, because of voluntary control, increased motor coordination will result. Other reflexive actions of babies are rooting with the mouth for food, a startle reaction to sudden stimuli such as loud noises, and the Babinski reaction, wherein the toes fan out and foot twists inward when the sole of the baby's foot is stroked (Goldberg & Duetsch, 1977).

Developmental tasks and motor development are closely related. A developmental task is defined as a task in learning that arises at or about a certain period in the life of an individual. Successful achievement of this task is necessary for happiness and success in mastering later tasks of life. Motor development and control are necessary for the achievement of many of these tasks (Draper & Draper, 1979).

Normal motor development proceeds in a predictable pattern although the rate of motor development will not be the same for every child. Motor development progresses when an infant is maturationally ready to engage in

certain activities (Papalia & Olds, 1979). Bones, muscles, and nerves must be developed to an appropriate stage before the child can learn a specific skill.

Studies made of manipulative ability of infants have shown that at two and one-half months the infant will grasp an object reflexively if it is brought into contact with the palm of his/her hand. By five months, the infant grasps objects with fingers opposed to the heel of his/her hand. At seven months, grasping with thumb opposition is beginning to develop and is well developed by nine months. Mature prehension, using fingers and thumb together like an adult, is apparent at twelve months. The motor skills of the two-year-old show marked improvements in reaching, grasping, block building, eating, self-feeding, and handling objects (Mussen, Conger, & Kagan, 1979).

The chart below briefly describes the motor development of the infant and young child (Ames, 1979; Lefrancois, 1977; Mussen et al., 1979).

Order of Motor Development

<u>Age</u>	<u>Activity</u>
12 weeks	<ol style="list-style-type: none"> 1. Smiles spontaneously 2. Lifts head when supported at shoulders 3. Holds head steady in prone position 4. Hands are mostly open 5. No voluntary grasp, reflexive only 6. Reaches waveringly for objects
16 weeks	<ol style="list-style-type: none"> 1. Plays with object placed in hand by shaking object and staring at it 2. Rolls over 3. Laughs 4. Head self supporting
20 weeks	<ol style="list-style-type: none"> 1. Uses both hands to grasp objects 2. Uses arms and hands in reaching 3. Sits when propped up 4. Crawling movements begin
6 months	<ol style="list-style-type: none"> 1. Sits without support 2. Bends forward and uses hands for support 3. Reaches and grasps toy 4. Reaching is unilateral (one-sided) 5. Releases one object when given another
8 months	<ol style="list-style-type: none"> 1. Stands alone, holding on 2. Creeps (on hands and knees) and crawls (Scooting on stomach) 3. Picks up objects with thumb and finger 4. Grasps with thumb and fingers 5. Can self-feed with finger foods

- 10 months
1. Creeps efficiently
 2. Takes side steps while holding on
 3. Pulls up to a standing position
- 12 months
1. Stands alone
 2. Walks when held by one hand
 3. May walk alone
 4. Mouths objects
 5. Seats self on floor
 6. Likes to climb
 7. Can manipulate toys that stack or fit together
 8. Can use fingers individually (can poke with fingers)
- 15 months
1. Walks alone in toddling fashion
 2. Creeps up stairs
 3. Climbs on furniture
 4. Grasps small objects with thumb and finger
 5. Holds cup and bottle alone
 6. Shows left- or right-handedness
 7. Drinks from a cup
 8. Likes to push objects in and out of any handy container
- 18 months
1. Grasp, prehension, and release well developed
 2. Can walk without falling down
 3. Stiff gait while walking and running
 4. Can build a tower of three blocks
 5. Sits on child's chair by backing into it with fair aim
 6. Creeps down stairs backwards
 7. Can turn pages of book and point to pictures
 8. Can pull toys
 9. Removes simple items of clothing
- 2 years
1. Can quickly alternate between standing and sitting
 2. Can fit toys together and likes to string big beads
 3. Can build a tower of six to seven blocks
 4. Can handle a cup well and can use spoon when eating
 5. Walks up or down stairs with only one foot forward (does not alternate feet)
- 2½ years
1. Can walk on tip toe
 2. Can push toy in direction intended
 3. In grasping, fingers grasp too hard; in releasing, fingers open too wide

3 years

4. Can sometimes be trusted to carry a breakable object
5. Can jump on two feet
1. Sure-footed and nimble
2. Can stand on one foot for a moment and throw a ball without losing balance
3. Likes to gallop, jump, walk, or run in time to music
4. Can feed self well without spilling
5. Can pour well from a pitcher
6. Can build tower of nine or ten blocks
7. Can put on shoes and unbutton buttons

Proper functioning of the sensory abilities is necessary for the child to perform even simple motor skills. The ability to see, to feel, and to maintain balance are all sensory-motor operations. Picking up a spoon requires seeing the spoon as well as muscle control in reaching for the spoon with arm and hand. Grasping the spoon requires manipulating the fingers to hold the spoon. The eyes must be coordinated with these body movements for successful completion of the eating task. Getting the food on the spoon, placing the spoon in the mouth, and returning the spoon to the plate requires control of motor movements and use of the senses at the same time (Draper & Draper, 1979). Motor development in a child progresses from a series of reflex actions at birth to fine muscle control over the entire body by the third birthday.

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- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

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Baker, K. R., & Fane, X. F. Understanding and guiding young children. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.

A very simply written text suited for high school students. Contains basic child development information and many photographs of children.

Bejou, S. W. Child development: The basic stage of early childhood. Englewood Cliffs, New Jersey: Prentice-Hall, 1976.

A very entertainingly and interestingly written text covering the whole area of child development. Contains many charts, illustrations, and references to research work. For teacher enrichment.

Brisbane, H. E., & Riker, A. P. The developing child. Peoria, Illinois: Charles A. Bennett, 1971.

A very comprehensive book about the child from the prenatal period through twelve years of age. A good high school text.

Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

A simply written text for low or medium level readers covering thoroughly the development of the child from the prenatal stage to six years of age.

Peterson, C. C. A child grows up. New York: Alfred Publishing Co., 1974.

A psychologist's detailed view of how children grow up. The book incorporates a day-by-day record or diary of the actual growth and development of the author. The diary was written by the author's father. High level readers in high school could use this book; however, the teacher would find it more useful.

LEARNING ACTIVITIES

1. Title: Group projects

Description: Divide into several groups. Have each group select an age range, discuss motor activities associated with that age, and then find illustrations or photographs that show those activities. The illustrations can be mounted and used on a bulletin board, flip chart, or put into a large picture album.

Materials Needed: Photographs, magazines

2. Title: Small group discussion

Description: Divide the class into three groups. Have each group discuss one of the following:

- A. Normal motor development proceeds in a predictable pattern although the rate of motor development will not be the same for every child.
- B. Motor development progresses when an infant is maturationally ready to engage in certain activities.
- C. Proper functioning of the sensory abilities is necessary for the child to perform even the simple motor skills.

Come back together as a class and have each group read its sentence, explain what it means, and discuss examples.

Materials Needed: None

3. Title: Observation

Description: Select an infant or toddler that can be observed. Find out what motor skills might be appropriate for a child that age. Observe the child and note whether the child can perform those activities. Remember the rate of motor development will not be the same for every child.

Materials Needed: List of motor skills

4. VOCABULARY

1. Motor development--A broad term that describes the attainment and use of control over the movement of different parts of the body.
2. Motor ability--The voluntary body movement that results as nerves and muscles work together.
3. Motor coordination--The controlled and balanced movements of the body parts.
4. Gross motor control--Involves the use of large muscles such as those found in the trunk of the body, the upper arms, and upper legs.
5. Fine motor control--Involves the use of muscles in the hands and fingers.
6. Babinski reaction--The toes fan out and the foot twists inward when the sole of the baby's foot is stroked.
7. Developmental task--A task in learning arises at or about a certain period in the life of an individual.
8. Mature prehension--Using fingers and thumb together like an adult.

INSTRUCTIONAL AID

Title: Transparencies.

Description: The "Walking Sequence" (Figure #28) and the "Grasping Sequence" (Figure #29) can be used when discussing these topics.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Pretest and Post-test

Description: Use the exam below as a pretest and then again for post-test.

Write "true" if the statement is true and "false" if the statement is false.

1. False In babies, small muscles develop and are used before large muscles.
2. False Babies can control leg muscles before neck muscles.
3. True New born babies have certain reflexive actions that cannot be voluntarily controlled.
4. True Just as physical growth proceeds from the head downward, so does control over muscles.
5. False Motor control develops from the extremities toward the center line of the body.

Match the following words to their definitions.

- | | |
|---------------------------------|---|
| 1. <u>e</u> Motor development | a. Using fingers and thumb together like an adult |
| 2. <u>g</u> Motor ability | b. The controlled and balanced movements of the body parts. |
| 3. <u>b</u> Motor coordination | c. Involves the use of muscles such as in the hands and fingers |
| 4. <u>h</u> Gross motor control | d. The toes fan out and the foot twists inward when the sole of the baby's foot is stroked |
| 5. <u>c</u> Fine motor control | e. A broad term that describes the attainment and use of control over the movement of different parts of the body |
| 6. <u>d</u> Babinski reaction | |
| 7. <u>f</u> Developmental task | |
| 8. <u>a</u> Mature prehension | |

- f. Learning that arises at or about a certain period in the life of an individual
- g. The voluntary body movement that results as nerves and muscles work together
- h. Involves the use of large muscles such as those found in the trunk or the body, the upper arms, and lower legs

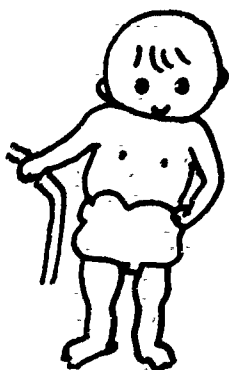
Materials Needed: Copies of quiz

Figure #28

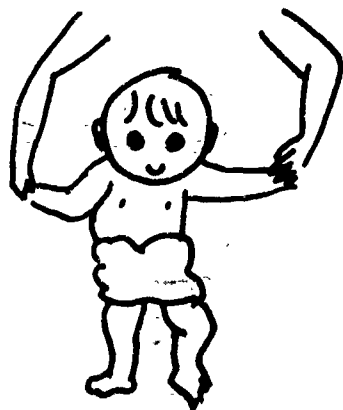


WALKING SEQUENCE

- 4 MONTHS - SITS WITH SUPPORT
- 6 MONTHS - SITS ALONE, LEANING FORWARD ON HANDS
- 7 MONTHS - SITS ALONE WITHOUT LEANING FORWARD ON HANDS, TRIES TO CRAWL



- 8 MONTHS - STANDS WITH HELP, CRAWLS (SCOOTS ACROSS FLOOR ON STOMACH WITH LEGS OUT-STRETCHED, USING ELBOWS TO PULL ALONG)
- 9 MONTHS - STANDS, HOLDING ONTO FURNITURE OR PLAYPEN RAIL
- 10 MONTHS - CREEPS (ON HANDS AND KNEES), PULLS TO STANDING



- 11 MONTHS - WALKS WITH HANDS
- 12 MONTHS - WALKS WITH HELP, CRUISES
- 14 MONTHS - STANDS ALONE



- 15 MONTHS - WALKS ALONE
- 18 MONTHS - RUNS CLUMSILY
- 2 YEARS - WALKS WELL
- 3 YEARS - RUNS WELL

Figure #29

"GRASPING SEQUENCE"		
3-4 MONTHS (16 WEEKS)	--	MAKES SWEEPING MOTIONS AT SMALL CUBE PLACED BEFORE HIM, BUT WITHOUT CONTACT
4-5 MONTHS (20 WEEKS)	--	BEGINNING OF GRASP WITH FINGERS OPPOSED TO HEEL OF HAND
5-6 MONTHS (28 WEEKS)	--	WELL DEVELOPED GRASP WITH FINGERS OPPOSED TO HEEL OF HAND
6-7 MONTHS (32 WEEKS)	--	BEGINNING OF THUMB OPPOSITION
8-9 MONTHS (36 WEEKS)	--	WELL DEVELOPED THUMB OPPOSITION ON CUBE, BEGINNINGS OF ABILITY TO GRASP PELLET
9-10 MONTHS (40 WEEKS)	--	PINCER (THUMB OPPOSED TO ALL FINGERS) GRASP ON PELLET
12 MONTHS (52 WEEKS)	--	NEAT PINCER GRASP (THUMB AND FOREFINGER) ON PELLET
2 YEARS	--	A DEFINITE HAND PREFERENCE IS NOTED

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: How Infants and Toddlers Learn

GENERALIZATIONS

1. Mental and physical growth are interrelated.
2. Mental development occurs in stages.
3. The ability to use inborn mental capacities may depend upon a child's health and the way the environment affects the child.
4. Children need many types of related experiences to develop concepts and to reinforce learning.
5. Adults can aid learning by acknowledging what a child does and expressing interest in the child's activities and accomplishments.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List three areas of intellectual activity which are involved in the study of the development of intelligence.
2. Match terms concerning intellectual development with their definitions.
3. Explain how the five senses are related to the learning process.
4. List factors influencing intellectual development of an infant.
5. Name at least two things besides inborn capacity that can affect a child's ability to learn.
6. Discuss one activity parents could use to encourage learning in an infant or toddler.

OUTLINE

- I. Definition of Learning and Cognitive Development
- II. Major Areas of Intellectual Development
 - A. Development of Senses
 - B. Development of Ability to Use Verbal Symbols
 - C. Development of Perception and Reasoning

III. Factors Contributing to Intellectual Development

IV. Types of Mental Development

- A. Sensory Perception
- B. Problem-solving
- C. Concept Development

V. Adult Influences on Mental Development

REVIEW OF SELECTED LITERATURE

Cognitive (mental) development starts early in infancy, as the baby uses his/her sensory and motor resources to interact with the environment and to explore the world. Cognitive development in infancy and toddlerhood includes (1) development of the senses, (2) development of the ability to use verbal communication and symbols, and (3) development of the ability to perceive, think, reason, and form concepts or ideas (Draper & Draper, 1979).

Jean Piaget, a Swiss psychologist, advanced one of the best known theories on the intellectual or mental development of children. This theory, resulting from meticulous studies of and experiments with children, is based on findings over the last fifty years. Piaget's theory states that cognitive development occurs in stages and that each stage prepares the child for the next stage (Brainerd, 1978). The first of these stages Piaget calls the "sensorimotor stage." This is the stage the infant and toddler are in.

There are three major cognitive accomplishments during this time, according to Piaget. The first is learning to coordinate and integrate sense impressions. That is the ability to understand that the action that is seen is what caused the sound that was heard or that the movements of the hands can be controlled by watching them.

The second major cognitive accomplishment is recognizing the world as being permanent and independent of the infant's own perception. Piaget calls this the concept of "object permanence." To the very young infant, if an object or the parent should leave his/her sight, that object or person has ceased to exist. Should either reappear, the infant believes there is a different but identical object or parent. Not until sometime after eighteen months is this concept fully developed.

The third major cognitive accomplishment of the sensorimotor stage is developing the ability to exhibit goal-directed behavior. In order to do this, the child must be able to form a mental image of what he wants to accomplish.

By the end of the sensorimotor stage, the young child has acquired the concepts of imitation, pretending, and insight, which can be used to solve

problems (Draper & Draper, 1979). The use of language has also become an important part of cognitive functioning.

By age six to nine months, concept development in the infant has begun to be established, and the infant knows the meaning of such words as "bye-bye" and the concept of who "baby" is. By the end of the child's first year, the family members can understand the baby's personal verbal code. By age eighteen months to two years, the infant has mastered one-word identification of pictures and can use words to symbolize ideas. The child of eighteen months to two years of age can also grasp simple time concepts, such as "later," and simple space concepts, such as "on top of." By age two, the toddler has begun to develop and understand "why" concepts, also, and by age two-and-one-half, the concepts of shape, color, and size are developing (McDermott, Norris, & Nicholas, 1976).

Two environmental factors, nutrition and stimulation, have an important effect on a child's cognitive development. Both play their most important roles during infancy and early childhood when the brain is growing and developing more rapidly. Poor nutrition interferes with the development of the brain and affects the child's ability to learn. An environment lacking in stimulation can also handicap or stunt a child's mental development by not providing adequate experiences to foster intellectual activity (Hurlock, 1978).

"Critical periods" are periods of time in which learning certain things can best occur. A critical period occurs when the child has reached the level of maturation where the new behavior can be learned. If specific stimulation is not available during this time, that particular behavior will either not develop at all or will appear late and in a handicapped or stunted form. For example, the lack of vocal stimulation during infancy will retard the young child's language development (Ambron, 1975).

A natural curiosity and desire to do things on the part of children suggest that they require intellectual stimulation by parents and other adults as much as they require proper nutritional care. Neither proper nutrition nor intellectual stimulation is a substitute for the other. Both are necessary to the child's well-being.

REFERENCES

- Ambron, S.R. Child development. San Francisco: Holt, Rinehart, & Winston, 1975.
- Brainerd, C.J. Piaget's theory of intelligence. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1978.
- Draper, M.W., & Draper, H.E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.
- Hurlock, E.B. Child growth and development. New York: McGraw-Hill, 1978.

McDermott, I. E., Norris, J. L., & Nicholas, F. W. Homemaking for teenagers book II. Peoria, Illinois: Charles A. Bennett, 1976.

SUGGESTED READINGS

Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

Excellent upper high school level text. Contains good charts, easily read style.

Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.

Excellent upper high school level text coordinated with teacher resource guide and a student workbook. Lends itself to varied presentations of materials.

Draper, M. W., & Polk, L. B. Caring for children: Teacher's resource guide. Peoria, Illinois: Charles A. Bennett, 1979.

An excellent guide which includes introductory materials, a conceptual overview, and curriculum framework. Content for each chapter includes the following: chapter goal, performance objectives, evaluation devices, and activity sheets.

Papalia, D. E., & Olds, S. W. A child's world: Infancy through adolescence. New York: McGraw-Hill, 1975.

College-level child development text. Very thorough coverage; excellent resource for teacher.

LEARNING ACTIVITIES

1. Title: Mobile

Description: Draw or cut out pictures from magazines that illustrate the five senses. Hang these to make a mobile. Discuss the relationship between the senses and cognitive development.

Materials Needed: Pictures, string, coat hanger

2. Title: Presentation

Description: Plan and present activities that would accomplish the following: (Remember, these are for infants and toddlers, so keep ideas simple.)

1. Encourage careful listening and watching
2. Play memory games
3. Teach nursery rhymes that help the child learn days of the week, numbers, or alphabet

4. Listen to records that teach basic concepts
5. Repeat stories, poems, ideas often to prevent forgetting

Materials Needed: Nursery rhyme books, educational records, children's game books, books that discuss the development of the infant

3. Title: Report

Description: Find out more about Jean Piaget and his theories on the intellectual development of children. Report to the class.

Materials Needed: Library facilities

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Use "Learn to Think" (Figure #30) bulletin board when introducing cognitive development of infants and toddlers.

Materials Needed: Backing, picture of a baby or toddler, poster paper, markers

2. Title: Posters

Description: The Pampers Company offers two free posters with six illustrations, each showing the mental development from six months to one year. Captions are given on posters.

Materials Needed: Posters

EVALUATION

Title: Pretest

Description: Draw lines on chalkboard to divide it into eight sections. Label each section with an age, (A) birth to three months, (B) three to six months, (C) six to nine months, (D) nine to twelve months, (E) twelve to eighteen months, (F) eighteen to twenty-four months, (G) two year old, (H) three year old. Read aloud a trait from the following list. Let students decide at what age an average baby would first exhibit that trait. Write the trait in the appropriate area.

Read the list of intellectual traits. Determine at what age an average baby would first exhibit each trait. Put the number of each trait where it belongs in the chart on the board.

1. Enjoys filling boxes with many items.

Nine to Twelve Months

2. Crying is the only way to communicate with others.

Birth to Three Months

3. Can differentiate between "before" and "after."

The Two Year Old

4. Studies and plays with fingers and hands.

Three to Six Months

5. Recognizes own name.

Six to Nine Months

6. Can wave good-bye.

Nine to Twelve Months

7. Laughs aloud in response to delight.

Three to Six Months

8. Likes to repeat words.

The Three Year Old

9. Likes to imitate and pretend; indicates ability to have mental image of events.

Twelve to Eighteen Months

10. Learns property rights "This is Daddy's, this is mine."

Eighteen to Twenty-Four Months

11. Can name some colors.

The Three Year Old

12. Asks questions such as, "Why?" "What's this?"

The Three Year Old

13. Indicates recognition of person by cooing or becoming excited.

Birth to Three Months

14. Hums and makes sing-song noises to music.

Twelve to Eighteen Months

15. Can make simple drawing strokes with large crayon.

Twelve to Eighteen Months

16. Knows own age.

The Three Year Old

17. Favorite words may be "all gone," "thank you," "good boy," or "good girl."

Eighteen to Twenty-Four Months

Materials Needed: Chalkboard

BABIES
LEARN TO THINK
AND
THINK TO LEARN

1. Learn To Use Senses
2. Learn To Use Verbal Communication
3. Learn To Perceive, Reason, and Form Concepts



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UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Language Development

GENERALIZATIONS

1. Language development proceeds from simple sounds to complex phrases, with each stage building on the previous stage.
2. Major tasks in language development include comprehension, pronunciation, vocabulary building, and sentence formation.
3. Health, intelligence, socio-economic status, sex, family relationships, and personality contribute to variations in speech development.
4. Cognitive development and language development are closely associated.
5. Parents and adults can help children learn to communicate by providing experiences that encourage speech development in a natural, pleasant way.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify the stage of language development in children from infancy through toddler stages when given examples.
2. Arrange the sequential stages of development of language in infants and toddlers in chronological order.
3. List major factors that influence language development.
4. Identify the terms used for pre-speech forms of communication from a list of several terms.
5. List and discuss activities parents and others can use to encourage a child's language development.

OUTLINE

I. Sequential Development of Language

A. Pre-speech Communication

1. Crying
2. Cooing
3. Babbling
4. Expressive jargon

B. Telegraphic Speech

C. Sentences

II. Factors Affecting Language Development

III. Theories on Language Development

A. Piaget

B. Chomsky

REVIEW OF SELECTED LITERATURE

Language, the primary tool of communication, is used to express ideas and feelings. Without it, the potential for interpersonal interaction is drastically reduced.

Pre-speech forms of language enable infants to communicate with others until they learn the skills needed for speech itself. Four common forms of pre-speech communication are (1) crying, (2) cooing, (3) babbling, and (4) facial expression. Infant cries may indicate various psychological as well as physical needs (Hurlock, 1978). Between the ages of four and eight months, infants recognize sounds as indicators of events, and at almost the same time, they respond to gestures from others, as well as use gestures themselves in intentional communication.

The acquisition of language occurs very rapidly in the young child, proceeding from mere crying in the newborn to complex sentence structures in a matter of a few years. The sequence of development of language during the first two years is largely determined by the child's cognitive and physical developmental levels, both of which are strongly influenced by heredity.

During the first month of life, the infant's vocalizations are largely reflexive and consist of an undifferentiated cry in response to any unpleasant situation. Beginning sometime during the first month, however, noticeable differences in the infant's cry can be discerned by parents. Many parents report being able to tell if the baby is hungry, in pain, or just being "fussy" by listening to the tone, pitch, and pattern of the cry.

As the infant begins to gain conscious control over his vocal organs sometime during the second month, he begins to "coo." Cooing is defined as puffs, "crows" and single vowel sounds like "ahhhh" made in the back of the mouth. Cooing continues throughout the third or fourth month and can be increased by the parents' smiling and talking to the infant, who will respond with a smile and cooing.

Around the beginning of the fifth or sixth month, the infant begins to add consonant sounds to the vowel sounds of cooing to produce babbling. Now the child may begin to make single syllable sounds like

"ba" or "ma" or "da." Parents will obviously respond with great delight when the infant accidentally stumbles on such significant vowel/consonant combinations as "ma" or "da." As a result, their reaction will reinforce and encourage the infant to repeat these sounds so that by the eighth month, certain syllables will be repeated over and over, such as "mama-mamama" or "dadada."

During the eighth month, another characteristic of pre-speech begins to appear. This is "expressive jargon." When listened to carefully, expressive jargon appears to have tone, inflection, and rhythm of regular speech, but consists of nonsense syllables. Many linguists feel that the child is learning and practicing the rhythm of speech, but as yet, does not have the actual words to use.

By the ninth month, the baby begins to associate the words "Mama" and "Dada" with the parents. The baby will continue to try to imitate sounds he hears and by twelve months will probably know two to ten words and will understand many more words and commands when spoken to him. At this time the child uses single words to convey whole sentence meanings. For example, "Cookie!" to mean "I want a cookie," or, "Give me a cookie."

By eighteen months the vocabulary is increased up to an average of fifty words. The young child will begin to put together two-word phrases and to combine words into combinations he/she has not heard before. At this time the speech is said to be "telegraphic" because like a telegram, it consists only of the basic words needed to communicate. "Give cookie" or "Give baby cookie" are examples. Modifiers and other such words are not yet a part of the child's spoken vocabulary.

From two years up through the pre-school years, language development continues at a very rapid pace. The two-year old will have a vocabulary of approximately 300 words, and his speech is mostly telegraphic. By age three his vocabulary has increased to approximately 800 to 1000 words.

The three-year-old child now speaks in complete simple sentences and understands many of the rules of grammar, such as how to make a word plural (add "s") or how to make a word past tense (add "ed"). Most of a child's mistakes in grammar at this time will result from applying the general rules of grammar to those specific incidents wherein the rule does not apply. For example, a young child may say that more than one "man" would be a group of "mans" rather than "men."

By age four the child's vocabulary is approximately 1500 to 2000 words and compound sentences appear. The four-year old may relate an incident with a long series of sentences all joined together with "and's." By age five complex sentences appear and the vocabulary is approximately 2000 to 2500 words, and by age six the vocabulary is over 2500 words.

Vocabulary is strongly influenced by environmental forces. Children who grow up in an enriched environment where parents and siblings

take the time to talk to them, ask questions and stimulate responses, these children will have a more extensive vocabulary and considerable skill in using language. On the other hand, the children who grow up in an environment where parents have limited vocabulary or where there is little communication will have a very poor vocabulary and language skills.

Piaget considers the language development of the young child in relation to the total developmental framework covered by his theory of cognitive development (Brainerd, 1978). This theory teaches cognitive development through four stages. Piaget sees the child developing basic language skills in the sensory-motor stage of development (birth to about twenty-four months of age). These basic skills, the pre-speech forms of communication, form the basis for the later establishment of verbal communication.

During the second stage of cognitive development, the pre-operational stage (ages two-seven), Piaget recognizes two forms of pre-school speech and categorizes them as "egocentric speech" and "socialized speech." Egocentric speech is the repetition of words and syllables for the pleasure of the monologue with no intention of communication. Many parents and teachers have observed a four year old playing alone and talking to himself/herself, playing with words and making up words. This seems to be a natural activity on the part of the child, practicing his/her newly developed, and to him/her, fascinating power of speech.

"Socialized speech" is speech specifically designed to communicate. It consists of communication for information, criticisms, commands, requests and threats, and questions and answers.

"Predeterminism" is a theory popular among contemporary linguistics experts, the most well-known being Noam Chomsky. This theory states that children have an inborn biological predisposition for learning language, similar to that of learning to walk. Children learn their native language in all cultures following the same stages of pre-speech and speech communication. In all cultures young children use the same kinds of one and two-word sentences. Chomsky (cited in Papalia & Olds, 1979) states that an inborn mental structure must enable children to build systems of rules of speech for all languages. Chomsky developed the theory that the child's brain is programmed to allow the child to create and understand language. This system of programming depends upon mature cells in the brain and is called the "Language Acquisition Device" (LAD).

REFERENCES

- Brainerd, C. J. Piaget's theory of intelligence. Englewood Cliffs, N. J.: Prentice-Hall Inc., 1978.
- Hurlock, E. Child growth and development. New York: McGraw-Hill, 1978.
- Papalia, D. E., & Olds, S. W. A child's world. New York: Holt, 1975.

SUGGESTED READINGS

Ambron, S. R. Child development. New York: Holt, Rinehart, & Winston, 1978.

An excellent text that contains general information about children. A discussion on language development is included. The appendix is very helpful.

Bee, H. The developing child. New York: Harper & Row, 1975.

A book on general topics concerning the growth and development of children. Language development of the pre-schooler is discussed.

Hurlock, E. Child growth and development. New York: McGraw-Hill, 1978.

A thorough text on child development.

LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Invite a speech therapist to talk about how children learn to speak. Find out what parents and others can do to encourage speech development.

Materials Needed: Letter confirming time and date, thank you letter

2. Title: Demonstration

Description: Teach the class some action rhymes that adults could use to encourage speech development.

Materials Needed: Nursery rhyme books

3. Title: Interviews

Description: Decide on ten questions to ask two year olds. Then interview as many two year old children as possible, asking the selected questions. Tape record the interviews, if possible. As a class, discuss how well the children answered the questions. Was there much difference among the individual children in speech development? As a follow-up activity, interview three year old children and compare their speech development with the two year olds.

Materials Needed: List of questions, tape recorder

4. Title: Jigsaw Puzzle

Description: Make copies of "Language Development Puzzle" (Student Handout #15), laminate, and cut apart. Put together in correct order of language development. If the puzzle is put together in correct order, the pieces will fit.

Materials Needed: Copies of puzzle, laminating materials

5. Title: Writing Assignment

Description: Many parents talk "baby talk" to their children. Based on knowledge of how children learn, do you think this is productive? Explain.

Materials Needed: Paper, pen

6. VOCABULARY

1. Cooing--puffs, "crows" and single vowel sounds like "ahhh" made in the back of the mouth. Occurs sometime during the second month.
2. Babbling--occurs when the infant begins to add consonant sounds to the vowel sounds of cooing. It occurs around the fifth and sixth month.
3. Expressive jargon--a form of pre-speech that appears to have tone, inflection, and rhythm of regular speech, but consists of nonsense syllables. Occurs during the eighth month.
4. Telegraphic speech--speech that is like a telegram in that it consists only of the basic words needed to communicate.
5. Egocentric speech--a pattern of pre-school speech that involves the repetition of words and syllables for the pleasure of monologue, with no intention of communication.
6. Socialized speech--a pattern of pre-school speech specifically designed to communicate.

INSTRUCTIONAL AID

Title: Story Book

Description: Make a large story book with each page illustrating a step in the development of language. For example, on the first page there might be a picture of a newborn baby crying, with a label stating the age and naming the stage. The title could be "The Talkin' Story" or "The Gift of Gab."

Materials Needed: Poster paper or large spiral pad, markers, pictures

EVALUATION

Title: Post-test

Description: The following questions can be used as an evaluation.

Matching:

- | | |
|--------------------------------|---|
| 1. <u>d</u> cooing | a. a pattern of pre-school speech specifically designed to communicate. |
| 2. <u>f</u> babbling | b. a form of pre-speech that appears to have tone, inflection, and rhythm of regular speech, but consists of non-sense syllables; occurs during the eighth month. |
| 3. <u>b</u> expressive jargon | c. a pattern of pre-school speech that involves the repetition of words and syllables for the pleasure of monologue, with no intention of communication. |
| 4. <u>e</u> telegraphic speech | d. puffs, "crows," and single vowel sounds like "ahhh" made in the back of the mouth; occurs sometime during the second month. |
| 5. <u>c</u> egocentric speech | e. speech that is like a telegram in that it consists only of the basic words needed to communicate. |
| 6. <u>a</u> socialized speech | f. occurs when the infant begins to add consonant sounds to the vowel sounds of cooing; occurs around the fifth and sixth month. |

Arrange these stages of language development in correct order:

- | | |
|--------------------------------------|---|
| Compound sentences appear - 10 | Associates words "Mama" and "Dada" with parents - 6 |
| Uses two word phrases - 7 | Vocabulary is up to 300 words; mostly telegraphic - 8 |
| Uses expressive jargon - 5 | Undifferentiated crying - 1 |
| Noticeable differences in crying - 2 | Babbling - 4 |
| Cooing - 3 | Makes complete sentences - 9 |

List major factors that influence language development:

- A. *Environmental factors*
- B. *Physical maturity*

Materials Needed: Copies of test
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UNDIFFERENTIATED
CRYING; REFLEXIVE
REACTION

NOTICEABLE
DIFFERENCES IN
INFANT'S CRYING

COOING

BABBLING

EXPRESSIVE
JARGON

216

ASSOCIATES WORDS
LIKE "MAMA"
AND "DADA"
WITH PARENTS

USES SINGLE WORDS TO
CONVEY WHOLE SENTENCE
MEANINGS; ABLE TO SAY
TEN TO TWELVE WORDS

BEGINS TO USE
TWO-WORD
PHRASES; VOCABULARY
IS UP TO AN
AVERAGE OF FIFTY
WORDS

VOCABULARY IS UP TO
THREE HUNDRED
WORDS; MOSTLY
TELEGRAPHIC

MAKES COMPLETE SENTENCES;
UNDERSTANDS MANY RULES OF
GRAMMAR

BEGINS TO MAKE COMPOUND
SENTENCES; VOCABULARY IS
APPROXIMATELY FIFTEEN
HUNDRED TO TWO THOUSAND
WORDS

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Role of Play in Learning

GENERALIZATIONS

1. Play is necessary for physical, mental, emotional, and social growth.
2. Play is a child's way of exploring the environment.
3. Learning through play should be easy, natural, and fun.
4. Creativity and play are interrelated.
5. During infancy, cognitive development is stimulated through play.
6. During infancy and early childhood years, developmental tasks are accomplished more readily with challenging, stimulating, and fun play.
7. Properly chosen toys can enhance learning and stimulate the child's imagination.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Describe characteristics of infant and toddler play.
2. Tell why play is important.
3. Name three ways that children grow in the area of learning through play.
4. List characteristics of good play materials.
5. Describe differences in play interests of infants and toddlers.
6. Identify play equipment appropriate for designated ages.
7. Discuss the role of toys for the young child and tell what to look for when choosing appropriate toys.

OUTLINE

- I. Definition of Play
- II. Importance of Play to Learning
- III. Play in Various Developmental Stages

A. Young Infant

B. Older Infant

IV. Qualities of Good Play Materials

A. Development of Learning Skills

B. Factors in Selecting Toys

V. Adult Influence on Play

REVIEW OF SELECTED LITERATURE

Play is activity participated in for the enjoyment resulting from that activity (Hurlock, 1978). Play is a child's work, but it is work that the child should enjoy (Ames, 1979). Play is the most serious business of a young child's life (Maynard, 1973).

Play stimulates development in children in a way that no other activity can accomplish. The benefits that a young child derives from play include (1) development of body control, (2) development of manipulative and coordination skills, (3) development of ability to concentrate on a certain task, (4) a chance to discover meaning about various things in the child's environment, (5) a chance to learn social skills for getting along with peers, and (6) a chance to learn to follow rules (Hurlock, 1978).

The play of young infants tends to be exploration of the environment through motor activities and the use of the five senses. The older infant's play is characterized by more visual contact and manipulation, and less mouthing of objects. Toddlers exhibit more creativity, imitation, and imagination in their play than do infants, and they also display a greater diversity or variety in play activities than do infants (Weisler & McCall, 1976).

Play materials should allow for development in the areas of creativity, self-expression, sensory perception, self-concept, development of new ideas, problem-solving, imagination, and language (Draper & Draper, 1979). When choosing toys, adults should consider durability and safety first. At least 134,000 children are treated in hospital emergency rooms each year for injuries involving toys. The Public Action Coalition on Toys (PACT), a group concerned with toy safety, has come up with a list of features to be aware of when buying toys: (1) no sharp edges or points, nails, wires, etc. that stick out, (2) cannot be easily swallowed, (3) free from small parts that can be removed and placed in ears, nose, or swallowed, (4) made of unbreakable materials, (5) non-toxic label (avoid painted toys for infants), (6) free of parts that can pinch or catch, (7) cords no longer than twelve inches for crib toys, (8) safe for its surroundings, (9) no hidden hazards, and (10) easily cleaned (cited in Ames, 1979).

When children are allowed to explore and pursue those activities which most interest them, learning will occur. When children are told constantly that their interests or preferences in activities are wrong or unsuitable

activities, they become confused about their abilities, their environment, and develop poor self-concepts or self-images. The parent or other adult can best help a child in development of learning by fostering play activities that show respect for the child's feelings and preferences without regard for "role" appropriateness or personal preferences. Parents should guide and assist, not manipulate a child's play (Gordon & Wollin, 1975).

REFERENCES

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.
- Gordon, S., & Wollin, M. W. Parenting: A guide for young people. New York: Oxford, 1975.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- Maynard, F. Guiding your child to a more creative life. New York: Doubleday, 1973.
- Weisler, A., & McCall, R.B. Exploration and play. American Psychologist, 1976, 31, 492-508.

SUGGESTED READINGS

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- Excellent upper high school-level text. Contains good chart, easily read from.
- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.
- A state-adopted textbook; is an excellent source. Clear, concise coverage. Includes chapter highlights, review questions, activities, and recommended readings for each chapter. Also has accompanying teacher resource guide and student guide or workbook.
- Draper, M. W., & Polk, L. B. Caring for children: Teacher resource guide. Peoria, Illinois: Charles A. Bennett, 1979.
- An excellent guide that includes introductory materials, a conceptual overview, and curriculum framework. Content for each chapter includes the following: chapter goal, performance objectives, evaluation devices, and activity sheets.

LEARNING ACTIVITIES

1. Title: Posters

Description: Divide into several groups and make posters on importance of play, selection of suitable toy, or toy safety. Display the posters in a pediatrician's office or the classroom.

Materials Needed: Poster paper, markers, or paints

2. Title: Listing Assignment

Description: Make a list of objects, not toys, around the house that children could play with safely. Examples would be pots and pans and boxes.

Materials Needed: None

INSTRUCTIONAL AIDS

1. Title: Bulletin Board and Toy Safety Checklist

Description: Cut out pictures of toys and laminate to geometric shapes on construction paper. Place these on the bulletin board. Make a copy of the "Toy Safety Checklist" (Figure #31) and laminate to construction paper. Place in the center of the bulletin board. Caption could be "Test the Toys." Discuss the checklist.

Materials Needed: Old Christmas catalog, letters, backing, laminating materials, construction paper, copy of checklist

Reference: Adapted from PACT Checklist cited in Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

2. Title: Transparency

Description: Use "Play Is Necessary for EMPS Growth" (Figure #32) when discussing this topic.

Materials Needed: Transparency materials, overhead projector

3. Title: Toy List

Description: Following is a list of suggested toys for the infant and the toddler.

0-3 Months

Colorful mobiles

Pictures hung near bed

Music boxes

2-3 Years

Push and pull toys

Wagon

Wheelbarrow

Records

Wind chimes

Bells

Clocks

Soft rubber balls

Rubber rattles

Stuffed animals

3-6 Months

Furry stuffed animals

Bumpy rubber squeeze toy

Smooth rattle

Teething toys

Cradle gyms

Safe toy mirror

6 Months- 1 Yr.

Pull toys

Soft animals

Nesting toys

Blocks

Balls

Squeeze toys

Pots and pans

Clothespins

Wooden spoons

Materials Needed: None

2-3 Years (cont'd)

Small jungle gym and slide

Large colored wooden beads to string

Wading pool

Large hollow blocks

Sand toys

Blunt scissors and colored paper

Peg boards

Tinker toys

Picture puzzles (3-4 pieces)

Nest of blocks

Doll and carriage

Broom and/or sweeper

Dump trucks

Simple boats

Animal toys

Easel

Large crayons

EVALUATION

Title: Quiz

Description: After reviewing the toy list in Instructional Aid 2, ask students to write these headings on a piece of paper:

Development of Strength and Skill
Constructive Play
Dramatic Play
Social Development
Aesthetic Development

Read off various toys and have students put each toy under the correct heading or headings. Then ask students to list three toys suitable for a baby aged birth to three months, for a baby from three to six months, and for a baby six months to one year of age.

Materials Needed: Paper, pen

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Figure #31

TOY SAFETY CHECKLIST

1. DOES THIS TOY HAVE SHARP EDGES, CORNERS, NAILS, OR WIRES ON IT?
2. CAN THIS TOY BE SWALLOWED?
3. CAN SMALL PARTS OF THIS TOY BE REMOVED AND PLACED IN EARS, NOSE, OR MOUTH?
4. IS THIS TOY MADE OF UNBREAKABLE MATERIALS?
5. IS THERE A NON-TOXIC LABEL ON THIS TOY?
6. COULD THIS TOY PINCH THE CHILD OR CATCH ON HIS/HER CLOTHING?
7. IS THE CORD NO LONGER THAN TWELVE INCHES?
8. IS THIS TOY SAFE FOR ITS SURROUNDINGS?
9. DOES THIS TOY HAVE ANY HIDDEN HAZARDS?
10. CAN THIS TOY BE KEPT CLEAN EASILY?

PLAY IS NECESSARY
FOR



224

EMPS GROWTH
M O T I O N A L
E N T A L
H Y S I C A L
S O C I A L

Figure #32

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UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Social Growth and Development

GENERALIZATIONS

1. Socialization is the process of integrating an individual into the social environment.
2. Children acquire their basic social attitudes from parents.
3. Interaction with the peer group is important because it provides the child with a unique set of give-and-take relationships.
4. A child's social self-image is shaped early.
5. As children move through different stages of social growth, many of the actions demonstrated are a result of watching and imitating adults.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define "socialization."
2. List a child's levels of social awareness.
3. Discuss the role that families play in the social development of children.
4. Tell how social development is stimulated through play.

OUTLINE

- I. Social Growth and Development of Infants and Toddlers
 - A. Socialization
 - B. Forces That Influence Social Development
 1. Home and Family
 - a. Parents
 - b. Siblings
 2. Neighborhood and Community
 3. Self

C. Development of Social Relations

1. Play

- a. Onlooker
- b. Solitary
- c. Parallel

REVIEW OF SELECTED LITERATURE

Socialization is a very broad term for the process by which an individual learns how to relate and interact to other members of the society. A child's social awareness develops on three main levels: (1) home environment, (2) neighborhood and community, and (3) world (Cattell, 1972). In many important ways, socialization continues well into the adult years, but the crucial first steps are taken before the infant is a year old (Ambron, 1975).

Of all the relationships affecting the child's development, the family is the first and most important force. In this setting the child begins to understand how human beings relate to each other. Initially, the child believes that all people relate to each other in the same way.

Experiences that the child has within the family develop a sense of acceptance or rejection by the primary group. The home should be the place where the child can feel unqualified acceptance (Westlake, 1977). When either or both parents reject a child, the child may become aggressive, attention-seeking, hostile, hyperactive, jealous, or rebellious. On the other hand, too much attention can hinder healthy development if this "smother" love prevents the child from assuming responsibility (Westlake, 1977).

Children acquire their basic personal attitudes from parents. Most psychologists believe that children tend to imitate the significant people in their lives. Parents, teachers, and peers influence the child by social feedback, which is the way they react to the child's social behavior (Munsinger, 1975).

The sibling relationships are the first relationships the child has with people who are not in authority. This experience becomes the child's first opportunity to cope with people at the peer level (Westlake, 1977). Brothers and sisters are the child's first peers. The child learns much from his/her interactions with siblings and from observation of his/her parents' responses to siblings' behavior.

The child moves from limited relationships within the family to peer group relationships. The original peer group usually consists of children in the immediate neighborhood. Eventually the child becomes part of a larger group. Children who have had day-care experience are more socially active and progress earlier in peer groups (Westlake, 1977).

The peer groups can also provide the child with a "workshop in human relationships," affording contact with children of various religions,

social classes, and ethnic backgrounds. This social exchange can help the child learn to accept, work with, and cooperate with people who hold different opinions and convictions.

A child's social self-image is shaped early. When a child grows up in a democratic home with genuinely affectionate, responsive parents, who are usually approving and understanding, the child accumulates many positive self-images which are important to later social adjustment and enjoyment of life (Peairs & Peairs, 1974).

Play is very important to the social development of children. As children grow, their play changes in form. Toddlers from one to two years old are self-centered and engage in solitary play. They may also spend much time watching other children at play (onlooker stage). In solitary play the child plays alone; however, as they grow older, children may prefer parallel play. Parallel play is typical of the three year old and is characterized by children engaging in the same activity, in the same place, but without interacting. An example would be two children, each with his/her own pail and shovel, playing in a sandbox. Parallel play gives children a feeling of closeness while allowing them to retain their individual activities (Ryder, 1979). Other stages of play appear as the child grows older.

REFERENCES

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- Cattell, P. Raising children with love and limits. Chicago: Nelson-Hall, 1972.
- Munsinger, H. Fundamentals of child development. New York: Holt, Rinehart, & Winston, 1975.
- Peairs, L., & Peairs, R. What every child needs. New York: Harper & Row, 1974.
- Ryder, V. Contemporary living. South Holland, Illinois: Goodheart-Wilcox, 1979.
- Westlake, H. G. Children--A study in individual behavior. Lexington, Massachusetts: Ginn, 1977.

SUGGESTED READINGS

- Baker, K. R., & Fane, X. F. Understanding and guiding young children. New Jersey: Prentice-Hall, 1971.

Good information on day-care centers.

- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

Text includes good information on social growth and development.

Peairs, L., & Peairs, R. What every child needs. New York: Harper & Row, 1974.

An interesting text on all phases of child care and development.

LEARNING ACTIVITIES

1. Title: Project Booklet

Description: Find illustrations--magazine pictures, drawings, snapshots, etc. that represent each of these statements:

- A. A child's social awareness develops on three main levels--home, neighborhood, world. (3 illustrations)
- B. The home should be the place where the child feels unqualified acceptance. (1 illustration)
- C. The child learns much through interactions with brothers and sisters. (1 illustration)
- D. Children who have had day-care experience are usually more socially active at an earlier age. (1 illustration)
- E. The peer group often provides the child contact with children of various religions, social classes, and ethnic backgrounds. (1 illustration)
- F. Young toddlers may spend much of their time engaged in solitary play. (1 illustration)
- G. Young children may spend much time watching other children at play. (1 illustration)
- H. Parallel play is typical of the three year old. (1 illustration)

Mount each illustration, label with correct statement. Make a creative cover and put together in booklet form.

Materials Needed: Paper, stapler, magazine, markers

2. Title: Observation

Description: Observe a group of toddlers at play. Try to find individuals who might be labeled one of the following: (1) a leader, (2) a follower, (3) a loner, (4) a bully, (5) a crybaby, (6) a hitter or pusher, (7) a teaser. Describe the behavior observed. Discuss in class.

Materials Needed: Clipboard, above list, pen

3. VOCABULARY

1. Socialization--Broad term for the process by which an individual learns to relate and interact with other members of society.
2. Solitary play--Playing alone.
3. Parallel play--Engaging in the same activity, in the same place, but without interaction.

INSTRUCTIONAL AID

Title: Transparencies

Description: When discussing social development, the transparencies entitled "Types of Play" (Figure #33), "Social Development" (Figure #34), and "A Child's Social Awareness" (Figure #35) could be used.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Post-test

Description: The following true-false statements could be used to evaluate students' knowledge.

Write "true" in the blank if the statement is true or "false" if the statement is not true.

False 1. Social growth generally begins at age two.

True 2. When either or both parents reject a child, the child is likely to be aggressive, attention-seeking, hostile, hyperactive, jealous, or rebellious.

True 3. The sibling relationships are the first relationships the child has with people who are not in authority.

True 4. Siblings are brothers and sisters.

False 5. Parallel play is interactive play.

True 6. A child's social self-image forms early.

False 7. Solitary play is characteristic of children three years or older.

True 8. Babies enjoy word games and rhymes even before they can talk.

Materials Needed: Copies of quiz

TYPES OF PLAY

ONLOOKER



SOLITARY



PARALLEL

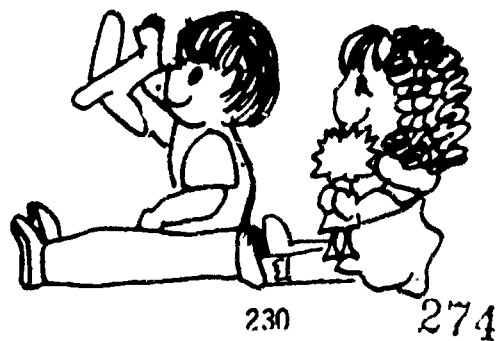


Figure #34

SOCIAL DEVELOPMENT

3-6 MONTHS--STARTS TO INTERACT WITH PEOPLE, ENJOYS PEEKABOO GAMES, TALKING AND SINGING OF ADULTS; LIKES TO WATCH PEOPLE MOVE AROUND AND TO LEARN LOVE



6-9 MONTHS--SHOWS ANXIETY WHEN AROUND STRANGERS, ENJOYS SOCIAL GAMES AND "RIDING" ON PARENT'S KNEE

9-12 MONTHS--COOPERATES WHEN BEING DRESSED AND WAVES BYE-BYE; LIKES TO SHOW OFF

12-18 MONTHS--SHOWS AFFECTION FOR TOYS OR PETS IN THE SAME WAY AFFECTION IS SHOWN FOR FAMILY MEMBERS; LIKES TO LISTEN TO MUSIC, DANCE, PLAY CHASE WITH ADULTS



18-24 MONTHS--MORE SELF-ASSERTIVE, ENJOYS ROUGH PLAYING; BENEFITS FROM BEING WITH OTHER CHILDREN; PARALLEL PLAY

Figure #34



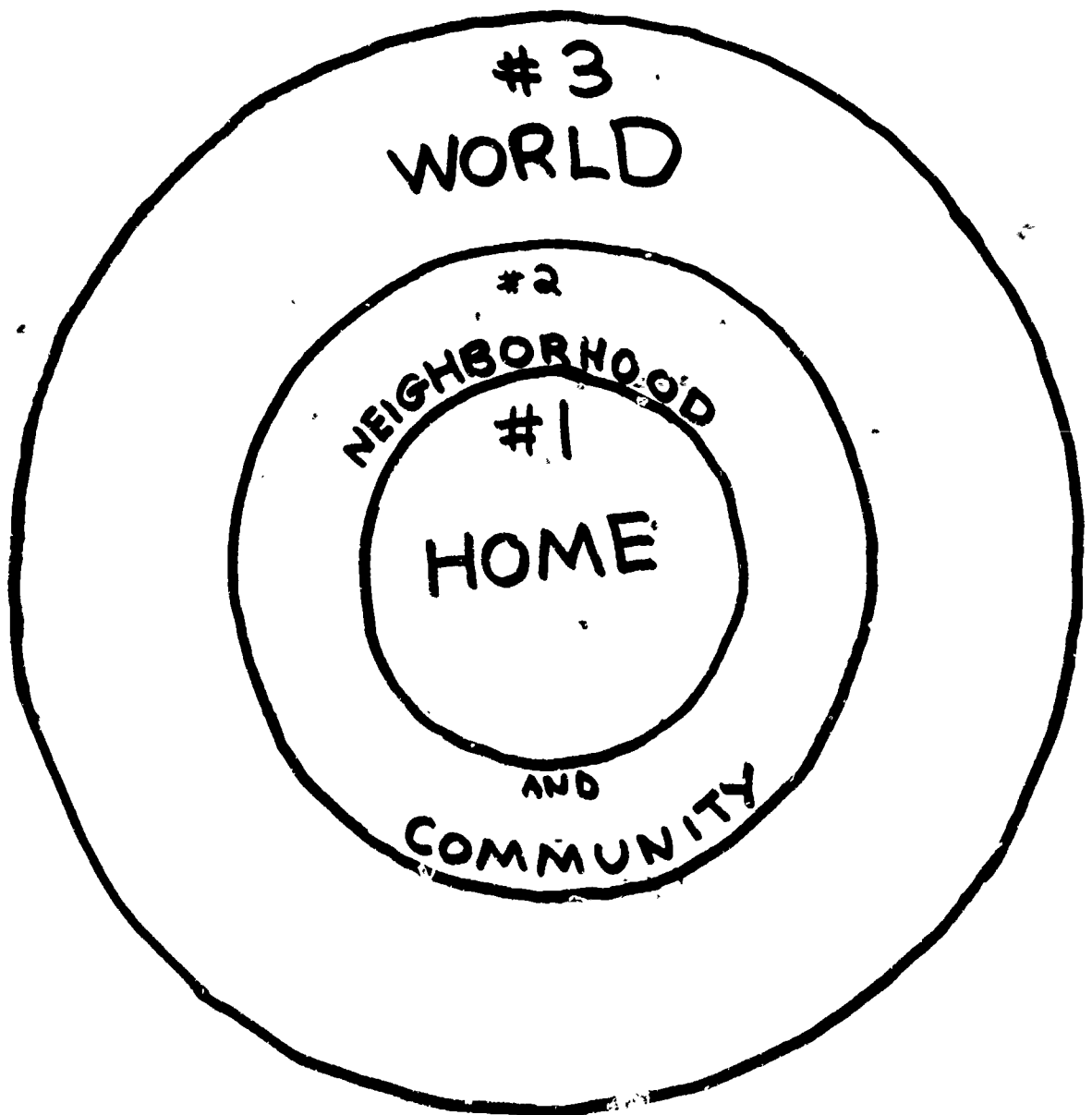
2 YEAR OLD--ENJOYS USING LARGE MUSCLES
AND PARTICIPATING IN CLIMBING
ACTIVITIES; STARTS TO LEARN MASCULINE
AND FEMININE SOCIAL ROLES; WILL TRY
TO SNATCH DESIRED OBJECTS

3 YEAR OLD--TRIES TO PLEASE AND
CONFORM TO OTHERS; ASKS MANY QUESTIONS;
ENJOYS DRAMATIC PLAY; NEEDS GROUP
EXPERIENCES AND FRIENDS; MAY EXHIBIT
DIRECT AGGRESSIVE FEELINGS

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Figure #35

A CHILD'S SOCIAL AWARENESS DEVELOPS ON 3 MAIN LEVELS



UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Emotional and Personality Growth and Development

GENERALIZATIONS

1. Personality traits develop as a result of early experiences in which the child imitates others.
2. Emotional development involves the understanding of and coping with feelings.
3. Early personality development is influenced by how the child learns to handle social relations.
4. The behavior of young children is egocentric.
5. Consistent nurturing, healthy emotional development, and achieving independence are interrelated.
6. The environment strongly affects the individual's personality development.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Discuss factors that affect a child's personality development.
2. Explain how the development and expression of emotions is intimately related to the child's personality adjustment.
3. Discuss causes of and ways in which infants and toddlers express emotion.
4. Identify common childhood fears.
5. Discuss causes of anger.

OUTLINE

- I. Emotional Growth and Development of Infants and Toddlers
 - A. Definition of "Emotion"
 - B. Emotion Indicators and Stimuli
 - C. Causes of Emotions
 - D. Emotional Needs

E. Types of Emotion

1. Love
2. Anger and frustration
3. Happiness
4. Stress
5. Fear
 - a. Causes of fear
 - b. Common childhood fears
 - c. Expressions of fear
6. Jealousy
7. Affection
8. Curiosity

II. Personality Growth and Development

- A. Development of Personality
- B. Forces that Affect Personality

REVIEW OF SELECTED LITERATURE

Emotional development involves the understanding of and coping with feelings. Emotional development is a gradual process which involves the discovery of a wide range of feelings such as safety, love, and the ability to trust others (Terry, Sorrentine, & Flatter, 1979).

The expression of emotions in infants and toddlers is reflected in their internal physiological state. A child indicates emotions in a variety of ways. Strong emotions are expressed by the child's whole body, i. e., crying, clenched teeth, kicking, and swinging of arms. Strong emotions are also associated with internal physiological changes such as increased heart rate, slowed salivation and digestion, quickened breathing, and dilated pupils (Munsinger, 1975).

The autonomic nervous system and the adrenal glands equip an infant for the same sort of physiological changes in emotion that an adult experiences. However, in early infancy the stimuli that cause emotional reactions are simple, physical, and immediate--discomfort and pain, other intense and unexpected stimuli, and perhaps, stroking and fondling (Sorenson, Malm, & Forehand, 1971).

Many child specialists believe that a newborn infant's only response to any kind of emotional stimulus is in the form of a generalized state of excitement. From this very simple emotional response, the other emotions develop as the infant matures. As the young child grows, great variations in emotional expression will develop over the years in (1) what elicits an emotional response, (2) the amount of physical reaction that occurs, (3) the outward expression of the emotion, and (4) the ways in which the person views and chooses to control the emotions (Sorenson et al., 1971).

Many of the changes in emotional reactions are learned through experience. The infant notices the emotional responses of the parents and others in the family and imitates many of these responses, usually without being aware of the emulation (Sorenson et al., 1971). Conditioning is another way in which emotional responses are learned. In conditioning, the reactions of those in the immediate environment teach an infant or young child acceptable and unacceptable ways of expressing the emotions. Being deprived of learning opportunities will also affect emotional development (Sorenson et al., 1971).

To achieve healthy emotional development, five basic needs must be met: security, acceptance, companionship, success, and new experiences. Inner security comes from knowing one's own capabilities and understanding one's feelings. No aspect of human relationships is more important than being loved and accepted unconditionally.

Friends and companions add meaning to life, for friends are important to all aspects of healthy growth and development. Everyone needs to feel worthwhile and successful. Success in one area can bring happiness and can lay the groundwork for success in other areas (Ryder, 1979).

The development and expression of emotions is intimately related to the child's personality adjustment. If emotions are denied or suppressed, they can lead to personality maladjustment.

Many of the emotions of childhood are first expressed during infancy and toddlerhood. The emotion of love is first experienced in infancy as a result of receiving nurture. As the infant passively receives food and is held and fondled, he/she identifies those pleasant feelings with his parents.

Infants first learn to love their mothers. Other members of the immediate family and other persons who actively provide nurturance will be included in the expression of affection as the experiences of the child broaden. In addition, inanimate objects (stuffed animals, dolls) and pets may receive the child's early feelings of loyalty, devotion, and concern and may provide the infant with intense satisfaction (Saxton, 1972).

The most common emotion in childhood is anger (Hurlock, 1978). Whenever a child cannot immediately have a thing desired, frustration and anger occur. In each successive year of the child's life, more and more restraints are imposed, and there is a greater demand for socially approved behavior. As a result, more anger-provoking situations arise (Hurlock, 1978).

Children's anger seems to reach a peak at around eighteen months of age and then gradually declines. At most ages, girls showed lower levels of angry outbursts than boys. Munsinger (1975) indicated that there are four main causes of anger in young children: (1) conflicts about routines such as going to bed or bathing, (2) conflicts about

discipline, (3) rejection of parental authority, and (4) anger over social situations, such as competing with a sibling for a toy or for parental attention.

Happiness is what makes a person feel content and secure in relation to the environment. A happy baby is one who is generally content regardless of occasional changes in the environment (new faces, new places) or changes in a schedule (a briefer-than-usual nap). Happy babies generally feel secure and remain stable in spite of such changes (Terry et al., 1979).

Common fears of young children include fear of animals, being dropped, being left alone, falling, strangers, loud noises, and strange places. Fear behavior follows a fairly definite and clearcut pattern in young children. This behavior is characterized by an attempt to withdraw from the fear-arousing object such as children trying to hide whenever frightened. The most common reaction to fear is crying.

Jealousy is closely related to anger. A child, believing his/her place in the affections of a loved one is being taken by another, may become annoyed. The most common cause of jealousy in early childhood is the birth of a younger brother or sister (Hurlock, 1978).

Affection is usually expressed by the child's wanting to be with the loved one and by the spontaneous patting, hugging, and kissing of a person or thing that he loves (Hurlock, 1978).

Children's curiosity will depend upon the environment in which they live. Anything new or strange will frighten a child slightly, but it will also instill curiosity. The child should be allowed to explore because that is one way in which learning takes place (Hurlock, 1978).

A child's first years, spent almost entirely with parents, affect his/her personality throughout life. The home's intimate and persuasive emotional atmosphere is crucially important to how a child perceives life. Routine daily activities, to which parents may give little thought, provide a child with pleasant and meaningful experiences from which conclusions may be drawn that will shape the personality (Peairs & Peairs, 1974).

Although the mother and father have the greatest influence on the personality development of the child, other members of the household also exert some influence. Brothers, sisters, grandparents, uncles, and aunts play a role in determining what type personality a young child develops. How great an influence they have depends upon how much time any one of them spends with the child and how great the child's affection for that person is (Hurlock, 1978).

Personality traits are greatly influenced by how the child thinks of himself/herself as a person. The child whose home environment

fosters a more realistic self-concept and who learns to accept his strengths and weaknesses will develop a more positive personality pattern. Characteristic traits will include a wholesome self-concept and patterns of adjusting to life which will make others love, respect, and accept him/her as a friend (Hurlock, 1978).

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- Munsinger, H. Fundamentals of child development. New York: Holt, Rinehart, & Winston, 1975.
- Peairs, L. & Peairs, R. What every child needs. New York: Harper & Row, 1974.
- Ryder, V. Contemporary living. South Holland, Illinois: The Goodheart-Wilcox Co., 1979.
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- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

SUGGESTED READINGS

- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

This is a very easily read state-adopted textbook that has good information on emotional growth and development.

- Ryder, V. Contemporary living. South Holland, Illinois: The Goodheart-Wilcox Co., 1979.

This very interesting book is easy to use. This text has an excellent emotional growth chart.

- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. New York: McGraw-Hill, 1979.

A good discussion on the emotions of the infant and toddler.

LEARNING ACTIVITIES

1. Title: Writing Assignment

Description: Some traits are inherited and some are learned from parents. Describe ways that you are like your parents.

Materials Needed: Paper, pen

2. Title: Circular Discussion

Description: Sit in a large circle. Take turns and describe a childhood fear, the origin of that fear, and how the fear has changed over the years.

Materials Needed: None

3. Title: Brainstorming

Description: Make a list of nervous habits that children might exhibit. What possible emotions do these habits express?

Materials Needed: Chalkboard, chalk

4. Title: Special Report

Description: Select a student to prepare a report on autism to present to the class.

Materials Needed: None

5. Title: Word Search

Description: Complete "Emotions Word Search Game" (Student Handout #16).

Key

1. trust
2. loyalty
3. anger
4. love
5. happy
6. emotions
7. adrenal glands
8. imitations
9. conditioning

T	R	U	S	T	O	L	O	A	L	T	Y	W	I	P	
W	A	N	G	E	R	O	E	H	A	P	P	Y	T	M	C
I	M	P	R	H	U	V	T	O	L	Z	O	M	E	I	U
P	O	R	L	T	Z	E	M	O	T	I	O	N	S	T	R
A	D	R	E	N	A	L	G	L	A	N	D	S	T	A	I
S	W	G	N	I	N	O	I	T	I	D	N	O	C	T	O
P	E	W	F	E	A	R	A	P	L	K	U	M	T	I	S
A	C	C	E	P	T	A	N	C	E	V	I	I	L	O	I
C	H	S	U	C	C	E	S	S	W	I	L	L	Y	N	T
Q	C	L	G	R	J	E	A	L	O	U	S	V	B	B	Y
V	N	S	C	O	I	C	O	N	F	L	I	C	T	J	X
Y	R	E	J	E	C	T	I	O	N	P	L	A	N	T	S
C	V	N	D	E	E	V	V	S	D	N	E	I	R	F	B

10. curiosity
11. fear
12. acceptance
13. success
14. jealousy
15. conflict
16. rejection
17. friends

Materials Needed: Copies of game

INSTRUCTIONAL AID

Title: Filmstrip

Description: "Anger and Sadness" is a filmstrip that deals with these two emotions, emotional control, and the fear children feel when they cannot control their emotions.

Materials Needed: Filmstrip, projector

Reference: Parents's Magazine Films, Inc., 52 Banderbilt Avenue, New York, N. Y. 10017 Cost \$69.50

EVALUATION

Title: Post-test

Description: Following are questions that could be used as a basis for a post-test.

Write "true" in the blank if the statement is true, write "false" if the statement is false.

- False 1. During an emotional situation, a young child's heart rate will decrease and breathing will be slower than normal.
- True 2. Many psychologists believe that a newborn infant's only emotional response is a generalized state of excitement.
- True 3. If emotions are denied or suppressed, they can lead to personality maladjustment.
- True 4. Love is first experienced as the infant is held, fondled, and fed.
- False 5. The first person an infant learns to love is usually the father.
- True 6. A very common cause of anger results from conflict about routines, such as going to bed or bathing.
- True 7. The most common reaction to fear is crying.
- True 8. A child's self-concept is an important part of personality development.

Answer the following questions:

9. Describe the external physical appearance of an infant or toddler showing emotions.

Expressed by whole body: crying, clenched teeth, kicking, swinging arms.

10. For healthy emotional development, five basic needs must be met. Name these.

Security, acceptance, companionship, success, and new experiences.

11. Name four common fears of young children.

Any four of these: Animals, being dropped, being left alone, falling, strangers, loud noises, strange places.

12. What is the most common cause of jealousy in young children?

Birth of a younger sibling

13. Brothers, sisters, grandparents, uncles, and aunts will influence a child's personality development. Name two factors that will determine how great this influence will be.

- 1) *The amount of time spent with the child.*
- 2) *The amount of affection the child feels for that person.*

Materials Needed: Copies of test

Emotions Word Search Game

Student Handout #16

Directions: Find seventeen (17) terms related to Emotional Development of the Infant and Toddler.

T R U S T Q L O Y A L T Y W I P
W A N G E R O E H A P P Y T M C
I M P R H U V T O L Z Q M E I U
P Q R L T Z E M O T I O N S T R
A D R E N A L G L A N D S T A I
S W G N I N O I T I D N O C T O
P E W F E A R A P L K U M T I S
A C C E P T A N C E Y U M L O I
C H S U C C E S S W I L L Y N T
Q C L G R J E A L O U S Y B B Y
V N S C O I C O N F L I C T J X
Y R E J E C T I O N P L A N T S
C Y N D E E Y Y S D N E I R F B

Be careful! The words read in several directions--left to right, right to left, top to bottom, bottom to top, and diagonally.

After finding the terms, write seventeen sentences using the terms. Your sentences should show how the terms relate to emotional development in young children.

UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Child-Care Facilities

GENERALIZATIONS

1. Because of changes in our society, there has been an increased need for child-care facilities outside the home.
2. There are several common types of day care.
3. In judging child-care facilities, parents should consider the building, furnishings, staff, program, and safeguards.
4. A child's adjustment to child care is facilitated by the parent's enthusiasm.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List five reasons for the increased need for child-care facilities.
2. List four types of child-care arrangements.
3. Explain what a family day-care home is.
4. Explain what the parent should consider in selecting a day-care center.
5. List three advantages of a day-care center.
6. Compare a nursery school to other day-care arrangements.
7. Evaluate a day-care facility.
8. List three ideas for making the transition to day care more pleasant for the child.

OUTLINE

- I. Need for Child-Care Facilities
- II. Types of Child Care
 - A. Family Child-Care Facilities
 - B. Day-Care Centers
 - C. Kindergarten or Nursery School

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III. Selection of a Child-Care Facility

- A. Building
- B. Furnishings and Equipment
- C. Staff
- D. Program
- E. Safeguards

IV. Preparing the Child for Child Care

V. Evaluating the Child-Care Situation

REVIEW OF SELECTED LITERATURE

The need for day care facilities outside the home is increasing, largely because both parents are now employed. In March, 1976, nearly forty-six percent of the children under eighteen years of age had mothers in the work force, and thirty-seven percent of preschoolers had mothers who worked (Children of Working Mothers, 1976). These figures have continued to increase steadily. Baker and Fane (1975) stated that for many families the mother is the sole support for the children. In other situations the mother works so that the family can raise its standard of living. Although most women work because of economic reasons, many work simply because they want to.

A child who lives with only one parent may need child-care services while the parent works. Children with special needs, i.e., the handicapped or gifted, will benefit from good child-care facilities. Many of these children need the professional help they may not be able to receive at home. School-aged children often need care after school hours.

Baker and Fane (1975) reported that "there is now a growing body of opinion that some school experience should be made available for all children by the time they are four." A good nursery school can provide a child with a wider range of experiences, contacts with people, and a broader base for later learning. The expense of child care is an acknowledged problem. The Tax Reform Act of 1976 gives a tax credit of twenty percent of child-care expenses to parents who meet the established criteria. This amount is limited to up to \$400 for one child, \$800 for two children, etc. (Children of Working Mothers, 1976).

There are many types of child-care arrangements that parents can make for their children. In all cases parents should be very careful about the selection of these facilities.

Some parents leave the child with a willing relative or neighbor (Baker & Fane, 1975). The relative or friend should respect and understand the parents' concern for the child and cooperate with the parents as much as possible.

Some parents bring another person into the home to care for the child. This person should have all the qualifications that the parents would require of a person giving out-of-home care. The obligations and job requirements should be agreed upon before the person begins to work (Day Care, 1974).

Some parents are involved in cooperative child-care programs. If there are several sets of parents who are having difficulty in finding child-care service, they may wish to rotate the child-care duties among themselves. Each pair of parents offer their services in the child-care facility for certain days (Day Care, 1974).

One of the most common arrangements for children under the age of three is the family day-care home. In this arrangement, the day-care mother takes care of children in her own home (Baker & Fane, 1975).

In Louisiana if a day-care mother keeps fewer than seven children, she is not required to have a license, which fact suggests that great care should be taken in the selection of a family day-care home. (Note: For current regulations, contact your local office of the Department of Family and Children's Services.) The parents should look for a home that is as close to where they live or work as possible, that is large enough, and that is in good repair. The house should have adequate bathroom facilities, a clean kitchen, and a fenced yard. The parents should have an interview with the day-care mother. They need to know her opinions about such things as play, food, toilet-training, hygiene, and discipline. The parents should also observe the other children at the day-care home (Day Care, 1974).

Once the parents have found a home that they feel is "right" for their child, they should fully understand the costs and services of the day-care home. They should consider the following questions: How many days of care a week will be required? Do the parents pay for absent days, holidays, and vacations? Do the parents pay in advance? Do they get a receipt for each payment for tax purposes? Who delivers and picks up the child? (Unless the parents have given permission, the child should never be turned over to anyone else.) What will the child call the day-care mother? What about meals and snacks? All these questions need to be answered.

Another child-care facility is the day-care center. These centers are designed to care for children all day while the parents are working. Many have goals and activities planned to meet the physical, mental and social needs of the children (Ambron, 1978). There are three main advantages of the day-care center. First, the service is more stable. If a family child-care mother gets sick, the parents have to make other arrangements for the child until the child-care mother is well. In the day-care center, a substitute teacher can be provided with relatively little disruption. Second, day-care centers are inspected and licensed and usually run by a professional director. (Note: Licensing requirements vary from state to state and change often in each state. Consult your local Department of Family and Children's Services for the latest licensing regulations.) The third advantage is that often the children are taught by trained teachers and staff members (Day Care, 1974).

Another facility that parents might want to consider is a kindergarten or nursery school. These programs are designed as a group experience for children from ages three to five. Nursery school is for three- to four-year-old children while kindergarten is for five year olds. They are not designed as an all-day school for the child. They usually meet only for a part of the day for a few days a week. The programs emphasize either social-emotional development such as sharing, taking turns, etc., or cognitive development such as learning the alphabet or learning to count, or a combination of both of these (Ambron, 1978).

In evaluating a day-care center or pre-school, the following questions should be considered. (These questions are compiled from three pamphlets: Guide to Good Care Facilities for the Working Parent, Some Ways of Distinguishing a Good School or Center for Young Children, and How to Choose a Good Day-Care Center for Your Child.) The questions are divided into five categories:

1. Building--How does it look? Is there a fenced yard? Is there child-sized play equipment? Is there enough space for the number of children? Thirty-five square feet per child inside and seventy-five to one hundred square feet per child outside is recommended. Is the building safe and sanitary? Is there adequate heating? Is there some sort of fire protection? Are there enough toilets and sinks for the number of children?
2. Furnishings and Equipment--Are there child-sized tables and chairs, low open shelves, puzzles, books, art supplies, doll corner, etc.?
3. Staff--Is the staff warm and friendly? How do they discipline the children? Are there enough teachers? Every group needs at least two adults so that in case of an emergency, one teacher can take care of the group while the other takes care of the individual child. For children under two years old, there should be one teacher for every three to five children. For three year olds, there should be one teacher for six to eight children, one teacher for every eight four year olds, and one for every ten five year olds. Do all members of the staff work together? What is the background of the director, teachers, and assistants? Is there adequate control over whoever is authorized to pick up the child? Do the teachers welcome observation and participation by parents? Do the teachers make a special effort to help the shy, retiring child?
4. Program--Is there a planned program geared to the needs of the children? Is there time for free play, outdoor and indoor playing, group activities, snacks, and rest? Do the teachers encourage creativity, provide opportunities for social adjustments, and help the children gain knowledge and language skills? Is the importance of regularity in children's lives recognized without overstressing routine and rigid programming?
5. Safeguards--Is the staff in good health? Are the children required to have physical examinations and vaccinations before entering the center? Are the children allowed to attend with minor illnesses

or must they stay home? Is there a pediatrician on call? Is there a staff member trained in first aid? Are there adequate first-aid supplies stored where the children can't reach them? Are teachers careful about regulating temperature of the room and overseeing appropriateness of the children's clothing? If the child becomes ill, will the center notify parents? How?

If a child is going into a day-care situation for the first time, the child may be afraid, nervous, and unhappy for a while. There are some suggestions which may make the transition to day care more pleasant. If possible, the parent and child should visit the center together before the child is left there. If the parents can arrange it, the parent should leave the child for only a short time the first day. Allow the child to take a favorite toy along if that will make the child feel more secure. The parents may help the child most by describing the center beforehand, making it seem a pleasant place (Day Care, 1974).

In a study done by Schwarz and Wynn (1971), it was found that most children will readily adapt themselves to the nursery school situation. Children with prior group experiences outside the home and on a regular basis were less apprehensive about the mother's departure. In their study done on suburban children, the authors found that the children adapted readily without the use of pre-visits or the presence of the mothers. The fact that parents conveyed a sense of enthusiasm about the school was the most important factor.

After the child has begun the day-care experience, the parents may be concerned about whether the child is happy in the chosen day-care center. The child should not have any drastic changes in eating or sleeping patterns. After an initial adjustment time, the child should have a reasonably easy separation from the parents. Even in the best day-care programs, there will be days when the child does not want to go, but this should not happen every day. All children will come home with the usual skinned knees and bumped elbows, but there should be no signs of bad bruises, bites, or burns, without explanation (Ambron, 1978). There should be some positive signs for the parents, too. The child should talk about events and activities at the center or day-care home. The child should be active and cheerful with lots of news to tell the parents (Ambron, 1978; Day Care, 1974).

REFERENCES

- Ambron, S. R. Child development. New York: Holt, Rinehart, & Winston, 1978.
- Baker, K. R., & Fane, X. F. Understanding and guiding young children. Englewood Cliffs, N. J.: Prentice-Hall, 1975.
- Children of working mothers. U.S. Department of Labor, Bureau of Labor Statistics, 1976.
- Day care for your children. Department of Health, Education and Welfare, 1974.

Guide to good care facilities for the working parent. Department of Treasury
Internal Revenue Service, no date.

How to choose a good day-care center for your child. Lafayette, Louisiana:
Louisiana Association on Children Under Six, 1977.

Schwarz, J., & Wynn, R. The effects of mothers' presence and pre-visits
on children's emotional reaction to starting nursery school.
Child Development, 1971, 42 (3), 919-927.

Some ways of distinguishing a good school or center for young children.
National Association for the Education of Young Children, no
date.

SUGGESTED READINGS

Day care for your children. U.S. Department of Health, Education and
Welfare, 1974.

This booklet offers excellent advice for parents on all types
of child-care arrangements.

Head Start: A child development program. U.S. Department of Health,
Education and Welfare, no date.

This booklet gives a good simple description of the Head
Start program. The HEW regional offices addresses are
listed.

Minimum standards for licensure of child care centers. Department of
Health and Human Resources, Office of Family Resources, 1977.

This booklet gives the requirements for organization, admin-
istration, personnel, etc. for day-care centers in Louisiana.
This pamphlet can be obtained by writing to Louisiana Health
and Human Resources Administration, Division of Family Ser-
vices, P. O. Box 44605, Baton Rouge, LA 70804.

LEARNING ACTIVITIES

1. Title: Presentation

Description: Develop a presentation on one of the following: (1) se-
lecting day-care facilities or (2) suggestions for making the transition
to day care easier for the child. The presentation could be given to
(1) a group of invited parents of young children, (2) a group of parents
of new children at a day-care facility, (3) a group of new parents at
the local Office of Human Resources.

Materials Needed: Varied, according to needs of presentation

2. Title: Field Trip and Checklist

Description: Divide into several groups and visit different local child-care facilities. Use "The Basis of a Good Nursery Checklist" (Student Handout #17) for summarizing information. Return to class and compile information. Decide what types of child care are available locally and the costs involved.

Materials Needed: Copies of Checklist

References: Checklist adapted from How to choose a good day-care center for your child. Lafayette, La.: LACUS, 1977, and Some ways of distinguishing a good early childhood program. Washington, D.C.: National Association for the Education of Young Children.

3. Title: Slide Program

Description: Select a few students to visit a good day-care program. Take slides of activities that represent each part of the daily routine. If possible, take a few pictures of special activities that don't occur everyday, such as a party or a field trip. Write a script to go with the slides. Present to the rest of the class.

Materials Needed: Camera, film, slide projector

4. VOCABULARY

1. Cooperative child-care programs--Rotating child-care duties among the parents of the children.
2. Family day-care home--A day-care mother takes care of children in her own home.
3. Day-care center--Designed to care for children all day while the parents work.
4. Nursery school--Preschool programs designed for three- and four-year-old children. The program usually emphasizes social, emotional, and cognitive development, not usually designed as an all-day school.
5. Kindergarten--Similar to the nursery school, but designed for five year olds.

INSTRUCTIONAL AIDS

1. Title: Poster

Description: The "Little Red School House" (Figure #36) can be used for review. Inside the school house, write review test questions.

Materials Needed: Poster paper, markers

2. Title: Bulletin Board

Description: When discussing activities that happen at a day-care center, use bulletin board "A Day in Day Care" (Figure #37).

Materials Needed: Backing, letters, markers, snapshots taken at a nursery could be used

EVALUATION

Title: Writing Assignment

Description: Select one of the following and answer:

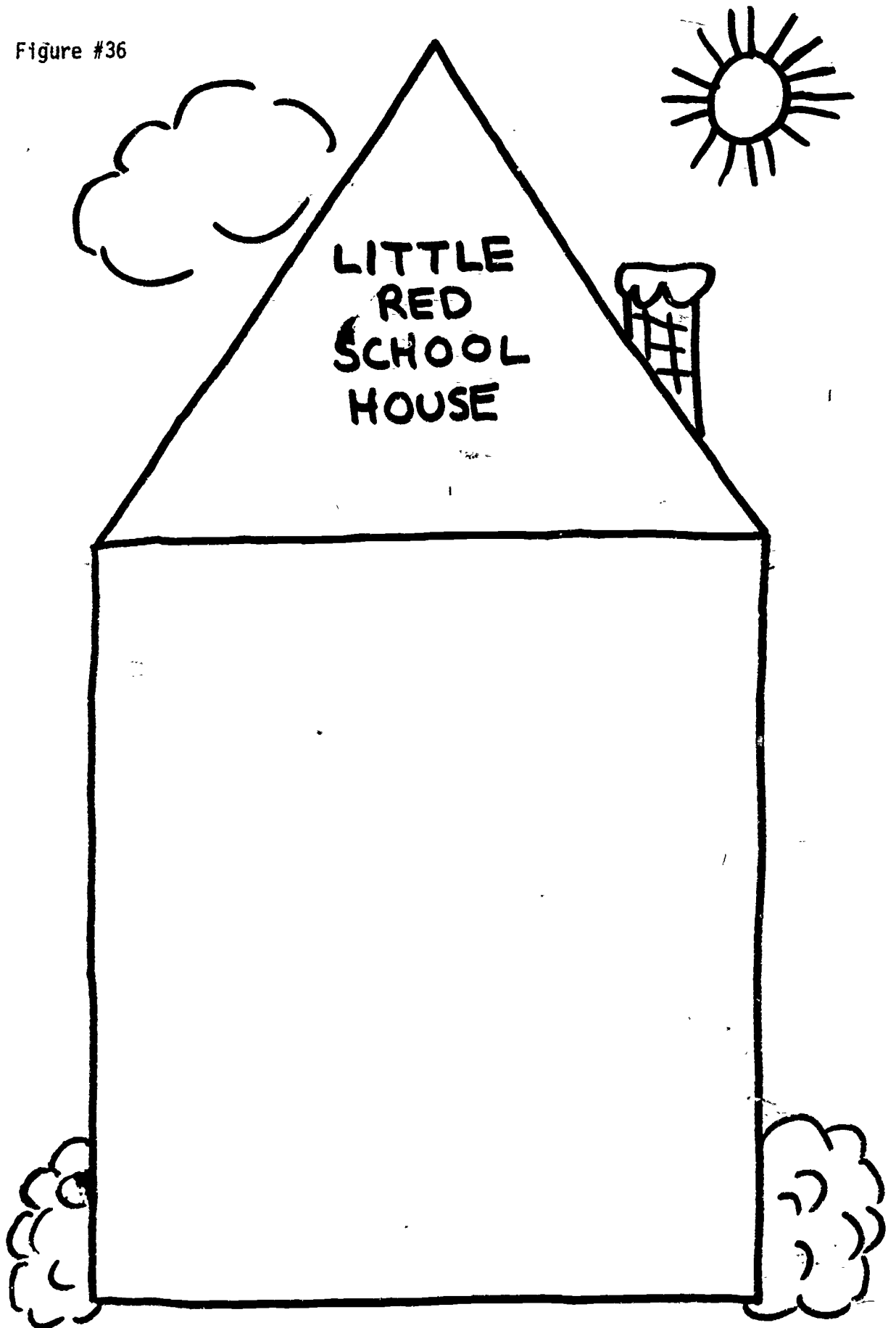
- A. Discuss factors parents should consider when selecting day care.
- B. Compare a nursery school to other day-care facilities.
- C. Describe ways of making the transition to day care easier for the child.

Materials Needed: Paper, pen

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Figure #36

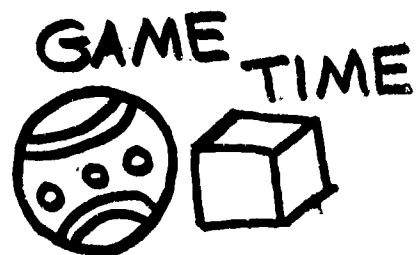
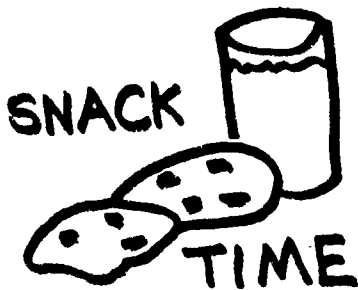
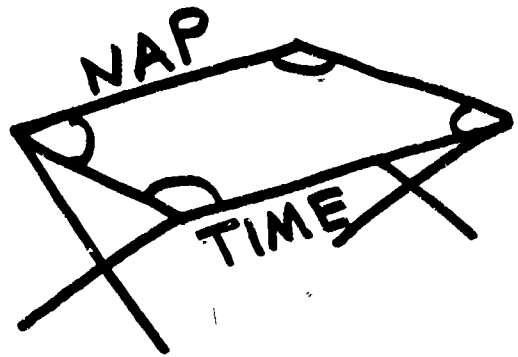
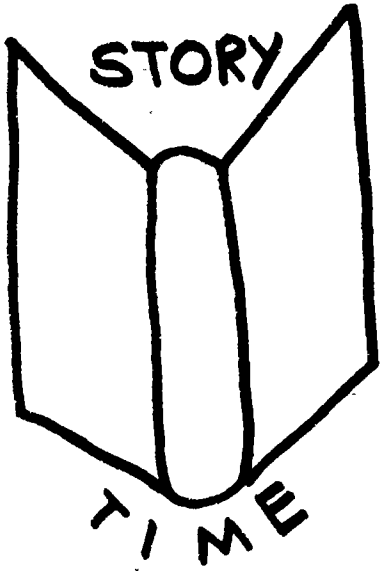


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Figure #37

A DAY IN DAY CARE



The Basis of a Good Nursery Checklist
 Student Handout #17

	Yes	No	Comments
a. Is the center licensed?	()	()	
b. Does the fee vary according to family financial situations?	()	()	
c. What is the fee?	()	()	
d. Does the center provide transportation?	()	()	
e. Are the children grouped according to age?	()	()	
f. Does the center provide snacks and a hot meal for the children?	()	()	
g. Are the fees paid by the hour?	()	()	
h. Do you feel the day-care center will provide the protection needed for your child and give you confidence while you are working or absent from your child?	()	()	
i. Are opportunities for the child's social and emotional development provided?	()	()	
j. Does the center provide appropriate and sufficient equipment and play materials and make them readily available for each child's enjoyment and development?	()	()	
k. Is the center clean?	()	()	
l. Did the director seem interested in your child?	()	()	
m. Are the playgrounds enclosed to protect children?	()	()	
n. Does the center carry liability and accident insurance?	()	()	
o. Are there child-sized tables and chairs?	()	()	
p. Does the center provide ample indoor (35 sq. ft. per child) and outdoor space (100 sq. ft. per child)?	()	()	

- q. Are there cots, baby beds, playpens,
and rocking chairs? () ()
- r. Are there low open shelves with toys
in easy reach of children? () ()
- s. Is there organization of puzzles,
books, art materials, blocks, doll
corners with playhouse toys? () ()
- t. Are there enough toilets and sinks
for the number of children? () ()

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UNIT: Growth and Development of the Infant and Toddler

CONCEPT: Observation Techniques--Analyzing the Patterns of Behavior

GENERALIZATIONS

1. Children should be observed with a specific objective in mind.
2. Observation forms are helpful for recording important data when observing children.
3. When observing, it is important to be objective.
4. Before beginning an observation, the observer should become familiar with the child's personal history and the daily routine of the school environment.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Observe an infant or toddler for a designated period of time and record the child's behavior during that time span.
2. Properly fill out a form for observing an infant, using the notes taken during the observation period.
3. Define the terms "objectivity," "value judgments," and "feelings" as they relate to observing an infant or toddler.

OUTLINE

I. Observation

A. Purpose

B. Objectivity

C. Subjectivity

1. Inference
2. Value judgments
3. Feelings

II. Guidelines for Observation

III. Types of Observation Techniques

- A. Anecdotal Record
- B. Log or Diary
- C. Time Sample
- D. Controlled Observation

REVIEW OF SELECTED LITERATURE

Observing children is one of the most commonly used methods of research. While observing, one can collect information concerning the development of the young child. The actual task of observing and then recording what has been seen will help the observer to recognize stages of development. Individual differences in the children can be observed.

Observation is a means of applying the technical knowledge learned in the classroom. This activity should enable the observer to develop additional child-rearing skills and to evaluate individual progress made in the study of child development.

When observing, it is important to be as objective as possible. "Objectivity" means seeing and reporting exactly what takes place. This means recording only the facts, without adding personal opinions about why the child behaved in a certain way. An example is not describing behavior as "good," "bad," "right," or "wrong," but only recording the behavior demonstrated by the child.

Looking at something from a personal point of view means looking at a situation "subjectively." In contrast to objective observations, subjective evaluations are based on fact, but include the observer's feelings and opinions. Subjective reactions can be classified as (1) inference--an opinion of why the child acted in a certain way; (2) value judgments--an opinion of whether the action was right or wrong; and (3) feelings--a personal reaction to the behavior.

Before beginning an observation, the observer should become familiar with the child's personal history and the daily routine of the school environment. During the actual observation, focus should be on a specific topic or question. The observer should know which types of behavior are to be observed. Two people observing the same situation may not report the same thing. The observer should look for actions, facial expressions, body movements, tone of voice, and language.

All observation information should be treated as confidential. The reports should neither be left in public view nor shared with others. The records are for the purposes of study only (Draper & Draper, 1977).

Listed below are several guidelines for observations identified by Draper and Draper (1977):

1. Concentrate on listening and seeing.
2. Be objective and sensitive.
3. Record accurately and concisely.
4. Remain inconspicuous while recording.
5. File observations as directed.
6. Observe professional ethics and the confidential nature of records.

When observing indoors remember:

1. Do not talk to other observers.
2. If a child talks to you, answer briefly and return to your work.
3. Do not initiate conversation with the children unless it is required in the observation guide.
4. Do not laugh aloud at things the children do.

When observing outdoors:

1. Always observe alone, do not carry on conversation with other observers.
2. Do not sit on play equipment.
3. Try to sit or stand at the outer perimeter of the activity you are observing.

Equipment needed for recording observations is pencil or pen, paper and/or forms, and a clipboard or small hardbacked tablet. Come prepared, sit back, relax, and enjoy the children.

There are several types of observation techniques that may be utilized for studying children. These techniques serve as tools to help the observer do a better job. Do not become so concerned with the technique that the actual study of the children becomes secondary.

Several types of observation techniques have been identified by Draper and Draper (1977). These techniques include:

1. Anecdotal Record--A report of a particular significant incident of behavior. This technique requires the recording of basic information about a situation, the setting, actions of the child and others involved, quotations of what was said, gestures and tones of voices. This record is designed to reveal a pattern of behavior for a particular child and is recorded over a period of time.
2. Log or Diary--A detailed record written in the present tense, of the most significant happenings of a child's behavior. The information may relate to a child or to a group of children. The description may be written in anecdotal form or may be written simply as phrases or sentences. The objective is to describe the child's actions on a daily basis. This technique is helpful to a teacher, parent, or student in following the progress of a particular child.

3. Time Sample--This technique is similar to the diary-log type record, except for two points: (1) it is not generally used on a daily basis, and (2) the time for observing is shorter. The time sample is used to study specific kinds of behavior. It is used in a limited time period and in a given setting. The purpose of this technique is to observe typical development. The child is usually observed for short periods of time during a variety of activities. This approach helps the observer to recognize an individual's pattern of development.
4. Controlled Observation--These observations require systematic recordings of what is actually seen and may take the form of a description, scale, or a checklist. The observer's attention is directed to specific actions or responses. Examples include what the child says or does, facial changes, and hand and body movement. The purpose of this technique is to collect information about children's typical development. Sensory and motor abilities, self-concept, thinking, social skills, emotions, and daily living habits are considered. This technique is helpful in identifying children with special problems. It is also helpful in identifying those who need help in one or more areas of development.

REFERENCE

Draper, H. E., & Draper, M. W. Studying children: Observing and participating. Peoria, Illinois: Charles A. Bennett, 1977.

SUGGESTED READINGS

Carew, J. V. Observing intelligence in young children: Eight case studies. Englewood Cliffs, N. J.: Prentice-Hall Inc., 1976.

Case studies of observed, daily experiences of forty-eight children from ages one to three. These children came from a variety of social classes and backgrounds.

Hildebrand, V. Guiding young children. New York: Macmillan, 1975.

This book focuses on the interpersonal interaction of adults with infants and preschool children.

Lamb, M. E. The development of sibling relationships in infancy: A short-term longitudinal study. Child Development, 1978, 49 (4), 1189-1196.

Twenty-four infants and their preschool-aged siblings were observed in a laboratory playroom in the presence of their parents. Analysis of the social behavior showed that the infants "followed" and preschoolers "led" the various activities.

LEARNING ACTIVITIES

1. Title: Observation

Description: Observe an infant or toddler. Check the behavior below that is observed:

- Discovering something new
- Working hard
- Watching an activity or person
- Listening to sounds
- Demonstrating fatigue
- Becoming frightened.
- Showing anger
- Showing impatience

Of the behaviors checked, select two and explain exactly what the child was doing and what was believed to have caused the reaction.

Materials Needed: Checklist, pencil

2. Title: Game

Description: Complete "Observing an Observer Magic Square Game" (Student Handout #18) according to directions on game sheet.

Key: Terms

- | | |
|---------------------|---------------------------|
| 1. facts (A) | 6. routine (B) |
| 2. observation (H) | 7. objectivity (E) |
| 3. confidential (F) | 8. talk (C) |
| 4. laugh (I) | 9. value judgment (G) |
| 5. forms (D) | 10. inference (no square) |

Materials Needed: Copies of game

3. VOCABULARY

1. Objectivity--Seeing and reporting exactly what takes place; recording only the facts.
2. Subjectivity--Looking at a situation from a personal viewpoint; based on fact but opinions are included.
3. Inference--An opinion of why an event occurred or a child acted in a certain way.
4. Value Judgments--Giving an opinion of whether an action was right or wrong.
5. Confidential--Not telling others about observations.

INSTRUCTIONAL AID

Title: Transparency

Description: Use a transparency entitled "Observing the Observer" (Figure #38) when discussing guidelines for observation. Cut a few acetate sheets into strips. On each of these strips, write a guideline for observations. The guideline should be written so that it can be laid over the transparency and projected on the screen within the drawn "TV Screen."

Materials Needed: Transparency sheets, markers, overhead projector

EVALUATION

Title: Writing Assignment

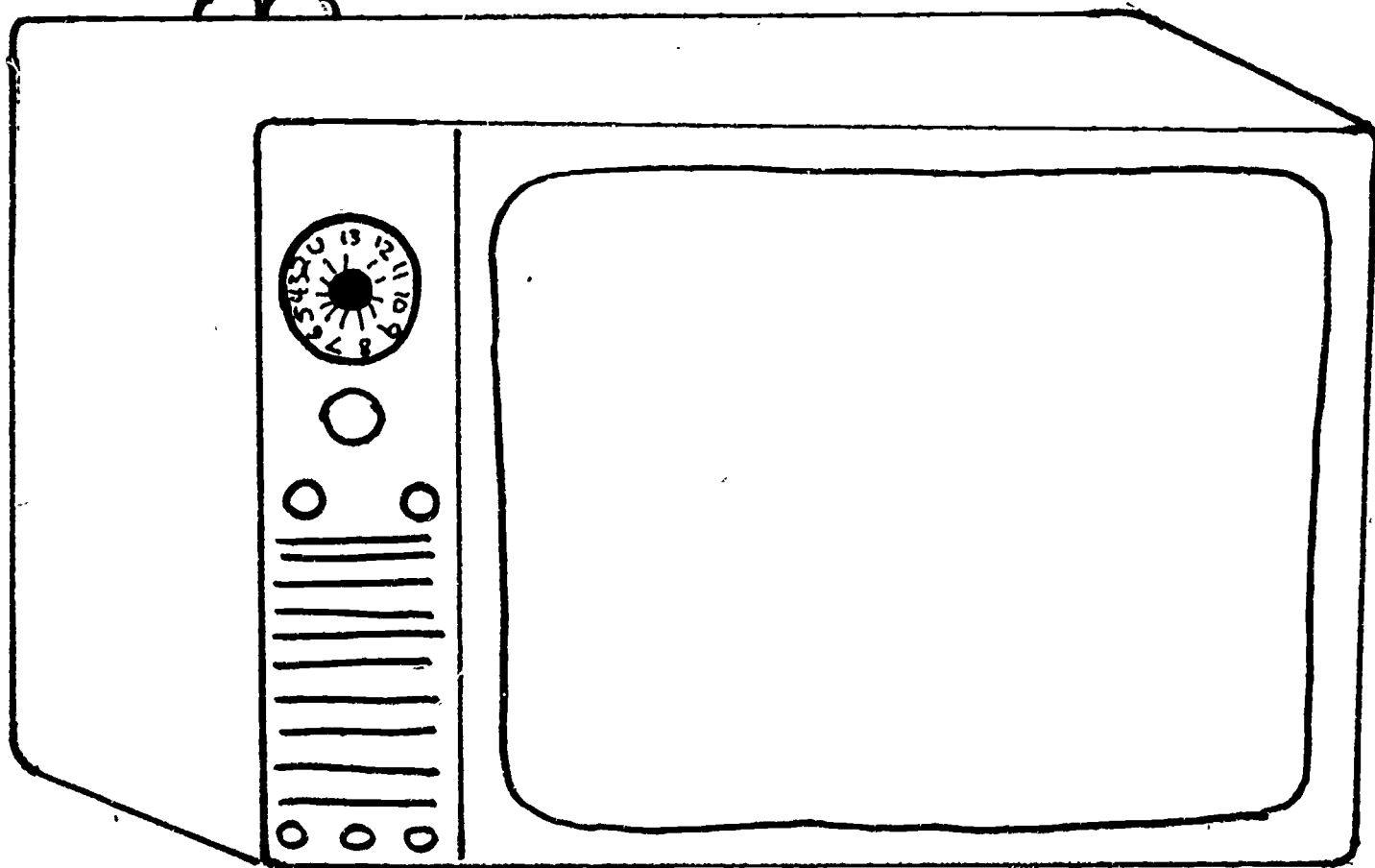
Description: (1) Define objectivity and subjectivity, (2) explain the importance of objectivity when observing children for a class assignment, (3) write a short story of what might happen if a student observer was not ethical about the confidentiality of observations.

Materials Needed: Paper, pen

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Observing the Observer

Figure #38



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Observing An Observer - Magic Square Game
 Student Handout #18

Find the term that is best to fill in each blank. Put the number of the correct term in each lettered square. If all your answers are correct, the total of the numbers will be the same in each row across and down.

Terms

1. facts
2. observation
3. confidential
4. laugh
5. forms
6. routine
7. objectivity
8. talk
9. value judgment
10. inference

A	B	C
D	E	F
G	H	I

Fill in the blank

- A. Only _____ should be reported when observing children, unless otherwise indicated.
- B. Before beginning an observation, the observer should become familiar with the child's daily _____.
- C. Observers should not _____ to each other while observing.
- D. Equipment needed for recording observations includes pencil, paper, _____, and clipboard or hardback tablet.
- E. _____ is seeing and reporting exactly what takes place.
- F. It is important that observations remain _____, which means not telling others about observations.
- G. A _____ is giving an opinion of whether an observed action was right or wrong.
- H. An _____ is a means of applying technical knowledge learned in the classroom.
- I. Observers should not _____ aloud at the things children do.

UNIT LEARNING ACTIVITIES (Growth and Development of the Infant and Toddler)

1. Title: Scrapbook

Description: Collect articles from newspapers and magazines and pamphlets from public agencies that are related to child development. Glue to construction paper and keep in a looseleaf notebook. Continue to do this throughout the unit.

Materials Needed: Scissors, glue, hole punch, construction paper, notebook

2. Title: Special Projects

Description: At the beginning of the unit, select one of the following activities:

1. Work in a church nursery a total of four hours.
2. Babysit for a baby or toddler a total of four hours.
3. Take a toddler to the playground.
4. Make a toy for a toddler.
5. Make a garment for an infant or toddler.
6. Prepare nutritious snacks for a toddler.
7. Prepare the food and take a toddler on a picnic.
8. Give a birthday party for a toddler.
9. Read stories to a toddler on four occasions.
10. Prepare a poster or report on one of the following:
 1. Toilet training
 2. Thumb sucking
 3. Toy safety or selection
 4. Contagious diseases
 5. Immunizations
 6. Child-care centers
 7. Hereditary diseases
 8. The handicapped child

Materials Needed: Varies according to project

3. Title: Puzzle

Description: Make a transparency of the "Amazing Questions" (Figure #39) using temporary markers. Have questions on slips of paper in a bowl at the front of the room. Divide the class into four or five groups. The first team draws a question, confers, and answers the question. If the question is answered correctly, the team has one opportunity to trace the maze. If they are unsuccessful, the next team draws a question and has an opportunity. The first team to reach the baby wins. (The maze may be re-used by erasing a portion of the line to make a new opening to the baby and drawing a line where the old opening was.)

Materials Needed: Grease pencil or temporary marker, transparency, overhead projector, questions on slips of paper

UNIT INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Use "Are You Up in the Air About Child Care?" (Figure #40) for a bulletin board. If the bulletin board is left up for the entire unit, try one of these ideas:

- a. Write a few good unit test questions on each balloon as that topic is discussed. Use these as review questions on days when there are a few extra minutes at the end of class.
- b. Write vocabulary terms on the appropriate "balloons."
- c. Remove the appropriate "balloon" from the bulletin board to the front of the classroom. Use as an introductory technique and way of focusing attention on the topic for the day.

Materials Needed: Background, construction paper

2. Title: Flannel Board

Description: Use "Are You Puzzled About the Growth and Development of the Infant and Toddler" (Figure #41) as an introductory activity. Have the pieces mixed up and let students put them together correctly. Describe each topic briefly as students place the pieces. If the flannel board can be left up for the entire unit, the ideas from the above bulletin board could be used.

Materials Needed: Flannel board, marker, large puzzle pieces, glue, letters for caption

UNIT EVALUATION

Title: Post-test

Description: Suggested test questions for a unit exam are listed below.

Write "true" in the blanks if the statement is true or "false" if the statement is false.

- True 1. The lower front teeth are usually the first to come through.
- True 2. Overdressing is a major cause of prickly heat and other skin rashes.
- True 3. Expressive jargon consists of nonsense syllables that mimic the inflection and rhythm of regular speech.
- False 4. Vigorous play immediately before bedtime will tire a child and help him/her get to sleep more quickly.
- True 5. In physical development, the neck and trunk develop before the legs and feet.
- True 6. Retarded growth is the most common sign of serious malnutrition in young children.
- True 7. Colostrum is easy to digest, rich in immunity factors, and has a slight laxative effect.
- True 8. An infant's bath water should be warm to the touch; check the temperature with your elbow.
- False 9. An infant develops the ability to control finger and toe muscles before learning to control arm and leg muscles.
- True 10. Socialization is the very broad term for the process by which an individual learns how to interact with other members of society.
- True 11. To make the transition to day care more pleasant, the child and parent should visit the center before the child is left there.
- False 12. There is no need for parents to be present during routine medical examinations of their children.
- False 13. Ice cream or candy is a good reward for the toddler who cleans his/her plate.
- True 14. Intellectual activity is affected by the child's ability to use the senses.
- True 15. A baby is burped after feeding to get out air bubbles.

Write the letter of the correct choice in the blank.

1. B A condition that prevents a person from functioning according to the demands of the environment is a/an
 - a. ossification
 - b. handicap
 - c. developmental task
 - d. none of the above

2. D Because safety is a primary concern, children's clothing should
 - a. be bright-colored
 - b. have securely attached buttons, snaps, and buckles
 - c. have attached belts and sashes
 - d. all of the above

3. C Sometime during the second month, the infant begins to make single vowel sounds like "ahhh" in the back of his/her mouth. This is
 - a. babbling
 - b. expressive jargon
 - c. cooing
 - d. none of the above

4. D Newborns spend the following amount of time asleep
 - a. twenty percent
 - b. forty percent
 - c. sixty percent
 - d. eighty percent

5. D Rapid growth occurs
 - a. before birth
 - b. during infancy
 - c. at puberty
 - d. all of the above

6. A New foods should be introduced to the infant
 - a. in small amounts at first
 - b. as soon as possible to insure adequate nutrition
 - c. before the age of three months
 - d. none of the above

7. C An advantage of bottle feeding as compared to breast feeding is
- a. it is better for a baby's digestive system
 - b. it is more likely to satisfy the infant's sucking needs
 - c. people other than the mother can enjoy the feeding process
 - d. all of the above
8. D Change an infant's diaper
- a. before and after feeding
 - b. before the baby is put to bed
 - c. whenever the baby seems to be uncomfortable
 - d. all of the above
9. B The broad term that describes the attainment and use of control over the movement of different parts of the body is
- a. Babinski reaction
 - b. motor development
 - c. developmental task
 - d. none of the above
10. B Two children, each with his/her own pail and shovel, are playing in a sandbox. This is an example of
- a. the onlooker stage of play
 - b. parallel play
 - c. peer group play
 - d. none of the above
11. D For young children a common reaction to fear is
- a. crying
 - b. trying to hide
 - c. running away
 - d. all of the above
12. C The most common cause of jealousy in early childhood is
- a. remarriage of a divorced parent
 - b. peers
 - c. birth of a younger brother or sister
 - d. none of the above

13. A Several sets of parents are having difficulty finding child-care service. They decide to start a day care facility with each pair of parents offering to serve for a certain day each week. This is an example of a
- a. cooperative child-care program
 - b. young people's educational service
 - * c. professional day-care center
 - d. none of the above
14. C Seeing and reporting exactly what takes place is
- a. subjectivity
 - b. inference
 - c. objectivity
 - d. none of the above
15. A A common communicable childhood disease is
- a. chicken pox
 - b. polio
 - c. cerebral palsy
 - d. all of the above
16. D The boy you are babysitting has fallen from a tree and you suspect he has a broken leg. You should
- a. move him inside quickly so he does not become chilled
 - b. wash the leg with warm water and soap
 - c. apply cold compresses
 - d. none of the above
17. C Babies are usually able to walk alone at the age of
- a. six to eleven months
 - b. eight to nine months
 - c. twelve to fifteen months
 - d. twenty-one to twenty-three months
18. D Crib toys should have
- a. no toxic surfaces
 - b. no cords longer than twelve inches
 - c. no sharp edges
 - d. all of the above
19. D Mental development includes
- a. development of the ability to think and reason
 - b. development of the ability to communicate
 - c. development of the senses
 - d. all of the above

20. D If a child is in shock, do

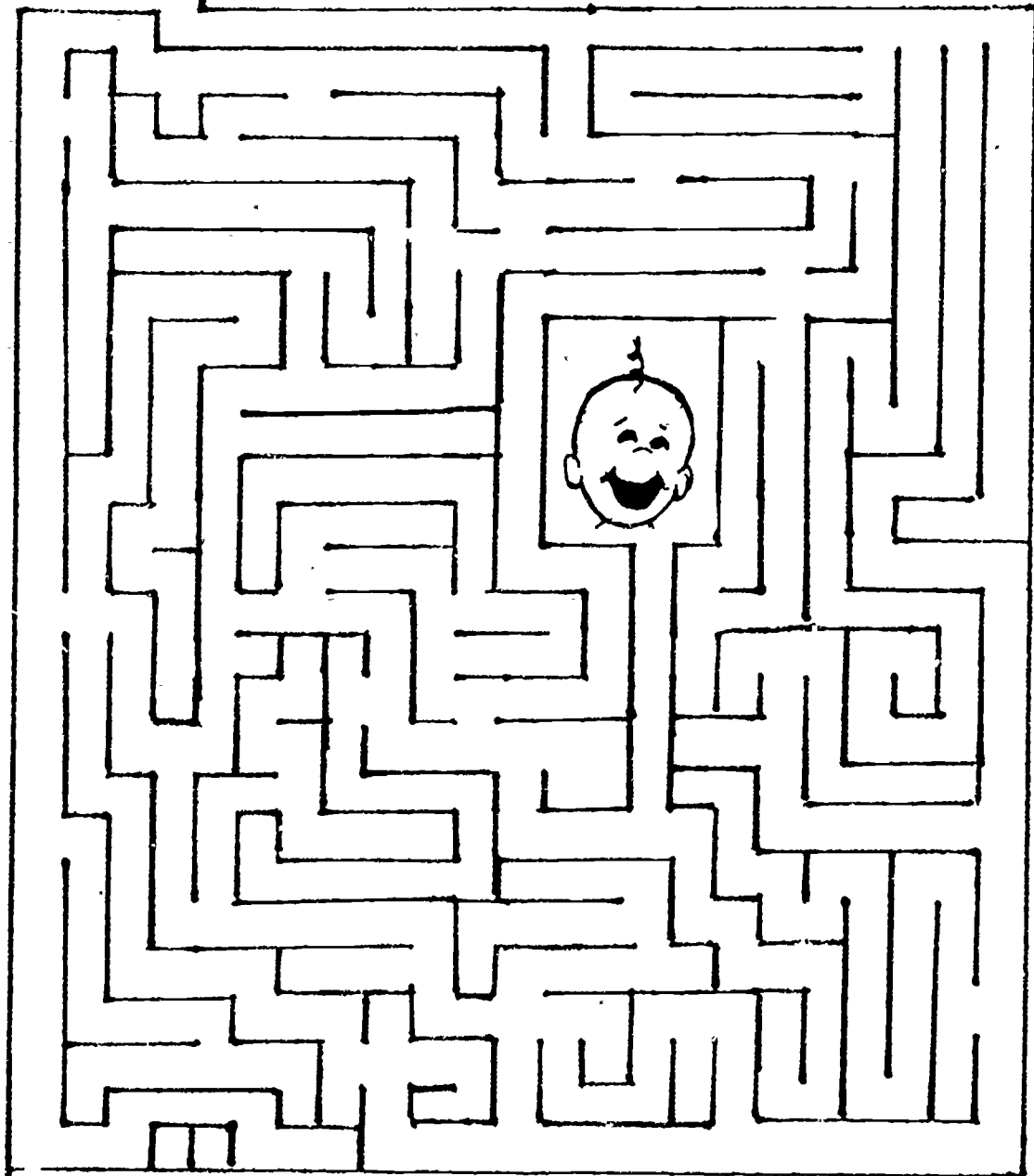
- a. keep the child warm
- b. keep the child in a flat position
- c. keep the mouth clear
- d. all of the above

Materials Needed: Copies of test

Figure #39

Amazing Questions

Start |



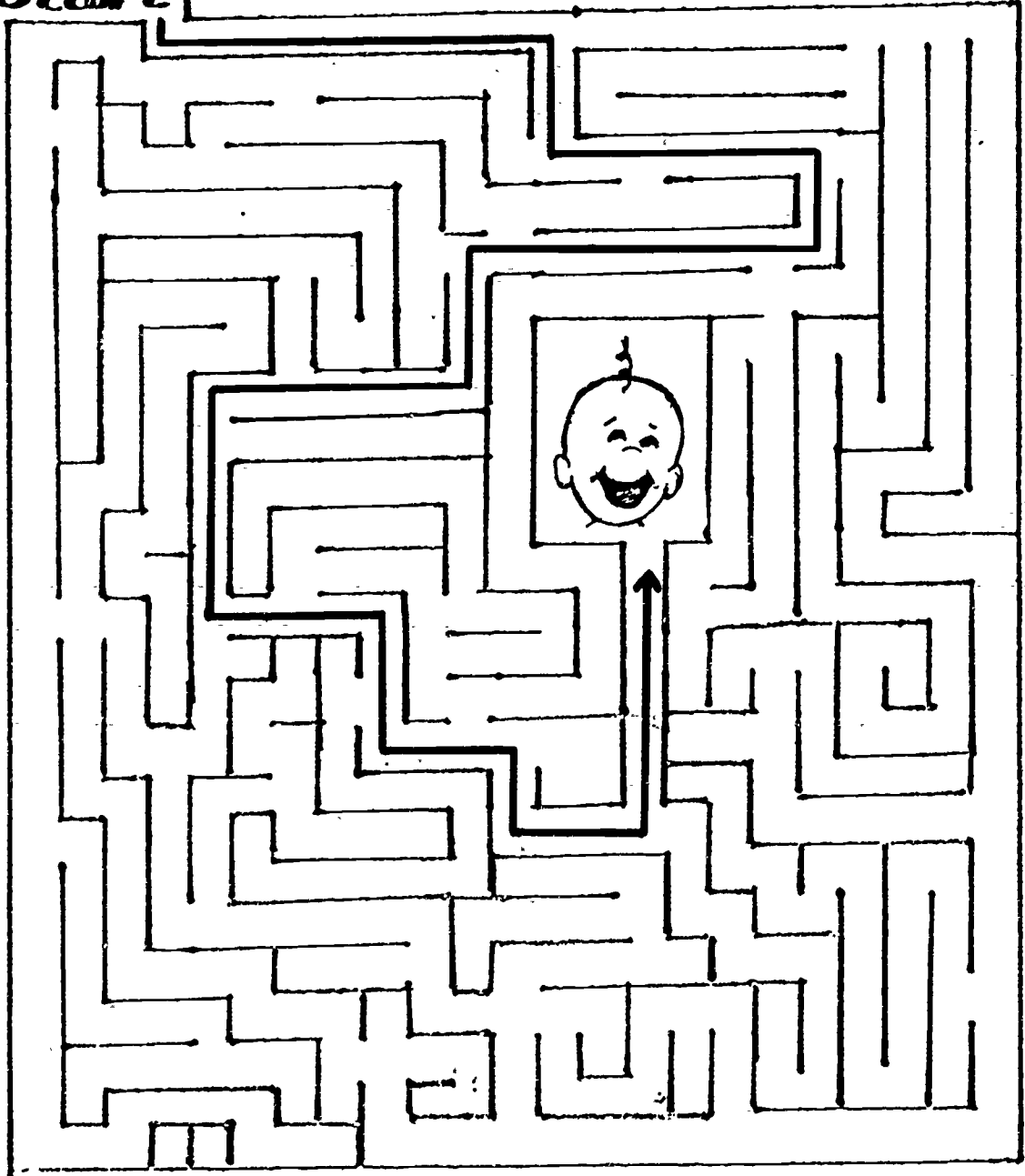
270

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Figure #39 (key)

Amazing Questions

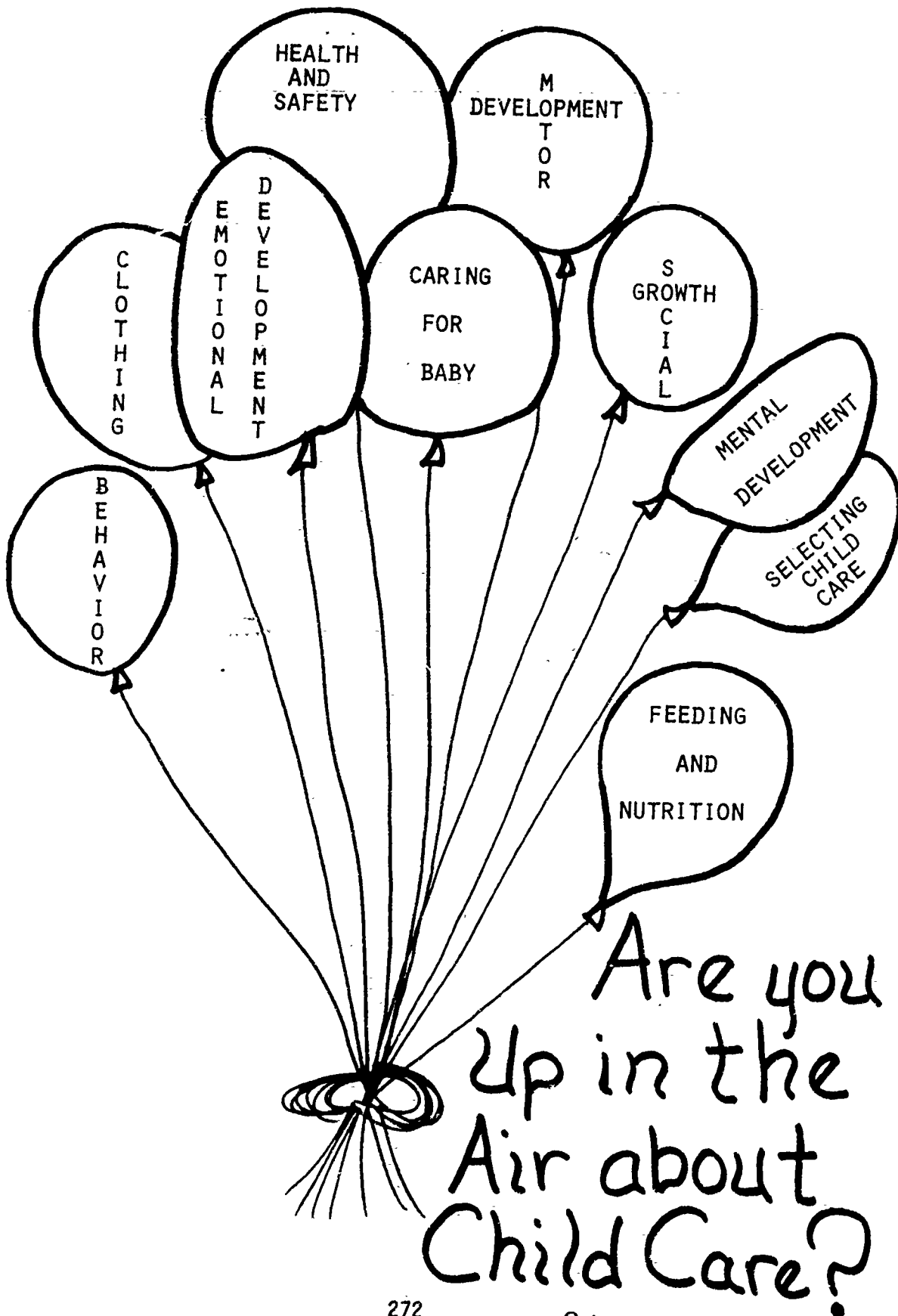
Start



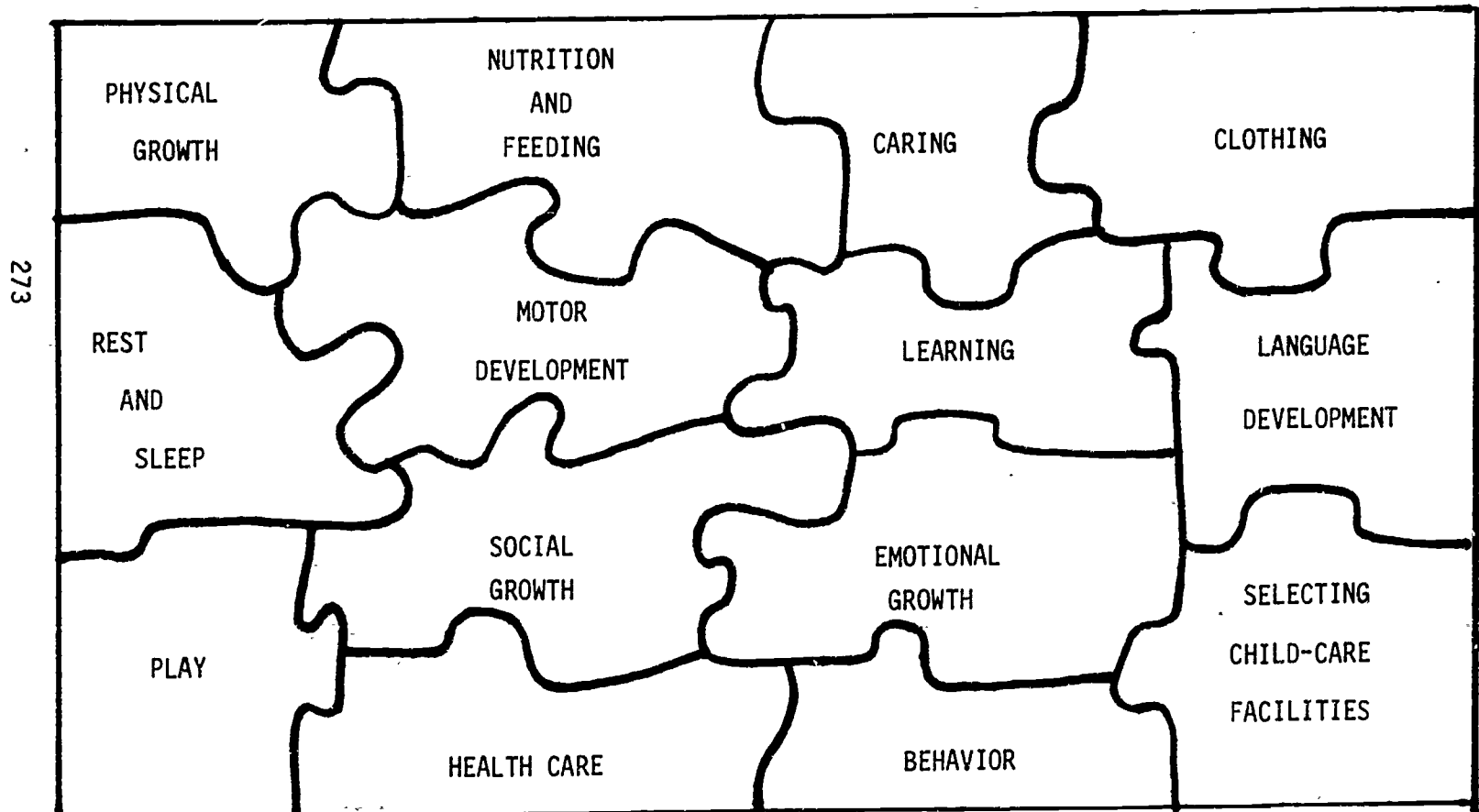
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Figure #40



ARE YOU PUZZLED ABOUT THE GROWTH
AND DEVELOPMENT OF THE INFANT AND TODDLER?



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UNIT: Growth and Development of the Preschool Child

CONCEPT: Physical Growth and Development

GENERALIZATIONS

1. Physical growth in early childhood follows a pattern of development.
2. Body proportions change in relation to the different growth rates of various parts of the body.
3. Gross motor skills of children develop earlier than fine skills.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define terms associated with the stages of physical growth.
2. Outline physical growth patterns of children three to five years old.
3. State factors that influence physical growth and development.
4. Describe motor development and coordination expected of three- to five-year-old children.
5. Define a minimum of five developmental problems of exceptional children.

OUTLINE

- I. Changes in Body Size and Shape
 - A. Growth in Height
 - B. Increase in Weight
 - C. Body Proportions
- II. Factors that Influence Growth and Development
 - A. Heredity
 - B. Environment
 - C. Physical Exceptionalities
 - D. Illnesses
- III. Motor Development

A. Gross Motor Development

B. Fine Motor Development

REVIEW OF SELECTED LITERATURE

The rate of physical growth decelerates during the early childhood years. Changes in body proportions and motor skills enable children to become more adept at dealing with their own needs and to cope with their physical surroundings. Height increase is no longer as rapid as it was in infancy. At the age of five, the average child stands about three and one-half feet, which is over double the length of the average child at birth (Helms & Turner, 1976).

Gain in body weight is also slower in early childhood than in infancy. At the age of three, the average child will weigh approximately thirty pounds. There will be a steady but slow gain until age five when the average child will weigh about forty-two to forty-five pounds, approximately five times birth weight. Boys tend to be slightly heavier than girls, having more muscle and less fatty tissue. The weight gain for all children during early childhood comes more from growth in bones and muscles than from fat tissue. As the fat diminishes in amount, the abdomen protrudes less, the legs and arms become thinner, and muscular tissue become more prominent.

Body proportions change in relation to the different growth rates of various parts of the body. For example, the head has almost completed its growth in width by the time the child is three years old, but it continues to increase in length until late adolescence. As the lower part of the skull becomes larger in proportion to the upper part, the child loses the babyish look. The shape of the jaw takes on a different appearance when the permanent teeth replace baby teeth. As the trunk, legs, and neck increase in length, the child is able to achieve better balance of the body.

Some inherited characteristics, such as color of eyes and skin, texture of hair, and shape of hands, are relatively immune to environmental influences; however, many inherited characteristics are influenced by environment. Growing children may have their height potentials stunted if they are deprived of adequate nutrition and sunlight, if they are forced to do work too heavy for their undeveloped bodies, or if they suffer from long, wasting illnesses. Much of physical growth depends upon the body's response to its environment. Inherited potentials have a much greater chance to develop if a stimulating environment is provided at the appropriate time (Hurlock, 1972).

Some children are born with special needs. The term "exceptional child" is an inclusive term that encompasses many different groups of children and many different types of problems within each group. Special needs such as high or low mental ability, physical handicaps, emotional disturbances, social maladjustment, or any condition that prevents children from functioning according to the demands of their environments should be given special consideration. A physical handicap may limit the activities of a child. Some children may be deprived of learning opportunities that

motivate them to do things for themselves. It may be very difficult or impossible for some motor skills to develop. Therefore, children with physical handicaps are faced with the adjustment problems characteristic of that age in addition to those arising from the handicap (Hurlock, 1972). Chronic illnesses such as infected tonsils and adenoids, intestinal parasites, rheumatic fever, and diabetes produce adverse effects on growth by compromising the ability of the body to function at peak health.

A sense of trust or security is of utmost importance in the development of the preschool child and is often conveyed in a physical manner. During the early years, frequent and relaxed bodily contact with parents or parent substitute is necessary for development. Although no words may be spoken, the child can sense the parents' love, acceptance, and relaxation, which instill the feelings of security (McCandless, 1967).

Motor skills develop rapidly because children are exposed to such activities as running, skipping, climbing, tricycle riding, throwing, and catching. Knowing what preschoolers are physically capable of undertaking and the degree of efficiency that can be expected is important to parents and other adults who are responsible for the guidance of children. Motor skill development requires time, environmental opportunities, and freedom to experiment (Helms & Turner, 1976).

During the first four or five years, the child gains control over body movements that involve the large areas of the body used in walking, running, jumping, and swimming. These are called "gross motor movements." The pattern of development follows a rather similar course in most children. At three years, the child can throw a ball, stand on one foot, climb stairways, and walk or run in time to music. The four year old likes to race up and down stairs, play with big blocks, and can throw a ball overhand. At five years, there is greater ease and control of general body movements than in earlier years. The five year old can alternate feet when descending stairs and can skip on alternate feet (Ames, 1979). The development of large muscles will permit the child to play more complicated games than when he or she was younger.

Fine motor skills are developed as the child learns to manipulate objects with the fingers and hands. By the time children reach age three, they have made great strides in eye-hand and small muscle coordination. They can draw circles, make flat cakes out of clay, button and unbutton well enough to dress themselves, and pour milk from a pitcher. Four-year-old children are able to cut on a line with scissors, make designs and crude letters, and draw their version of a person. They can lace their shoes and dress themselves. By the end of the fifth year, children will be able to control a pencil, color within lines, copy a square and print their first names (Papalia & Olds, 1979).

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- Hurlock, E. B. Child development. New York: McGraw-Hill, 1972.
- McCandless, B. R. Children: Behavior and development. New York: Holt, Rinehart, & Winston, 1967.
- Papalia, D. E., & Olds, S. W. A child's world. New York: McGraw-Hill, 1979.

SUGGESTED READINGS

- Ames, L. B. Child care and development. Philadelphia: Lippincott, 1979.

A good reference on the growth and behavior patterns of children.

- Draper, M. W., & Draper, H. E. Caring for children. Illinois: Charles A. Bennett, 1975.

A general text on child care, written to help develop competencies needed for work with children.

- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

An excellent text that describes infant growth and behavior patterns of preschool children. Includes a section on children with special needs.

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A very interesting and informative text on children from birth through adolescence.

- Smart, M. S., & Smart, R. C. Child development and relationships. New York: Macmillan, 1978.

Discusses the growth patterns of children.

- Department of Health, Education and Welfare. Your child from 1 to 6. (Publication No. (OHD) 76-3000026). Washington, D.C.: U.S. Document Printing Office, 1975.

LEARNING ACTIVITIES

1. Title: Role Playing

Description: Write each of the following preschool characteristics on separate strips of paper and place them in a container. Divide the class into two teams. Have one student from each team draw a characteristic and act it out. The opposing team will decide which characteristic is appropriate for which age group. The team with

the most points at the end of the game is the winner. Use the following suggested characteristics:

THREE YEAR OLD

alternates feet going upstairs
can ride tricycle using pedals
uses plurals in speech
feeds self with little spilling and pours from a pitcher
can put on own shoes
knows a few rhymes

FOUR YEAR OLD

can count (with correct pointing) three objects
can skip on one foot
can wash and dry face and hands, brush teeth
can draw a man with two parts--head and legs
dresses and undresses if supervised
laces shoes
plays cooperatively with other children
can go on errand outside home (without crossing the street)

FIVE YEAR OLD

skips using feet alternately
can count ten objects correctly
can identify a penny, nickle, dime
can name colors correctly
dresses and undresses without assistance
can print a few letters

Materials Needed: Paper and hat (bag, jar, box, fish bowl)

2. Title: Observing Pictures

Description: Bring a baby picture, a preschool picture, and a recent picture (ideally of the same person) and observe the physical differences.

Materials Needed: Photographs

3. Title: Field Trip

Description: Visit a day-care center that cares for infants and preschoolers. Make a list of observable physical differences between infants and preschoolers.

Materials Needed: Permission from principal, arrangements with day care center, permission slips, transportation arrangements, thank you letter.

4. Title: Crossword Puzzle

Description: Complete puzzle entitled "Physical Growth"

(Student Handout #19) using terms associated with preschool physical development.

Key:	<u>Across</u>	<u>Down</u>
	1. <i>large</i>	2. <i>exceptional</i>
	3. <i>security</i>	4. <i>double</i>
	5. <i>physical</i>	6. <i>chronic</i>
	7. <i>fat</i>	7. <i>five</i>
	9. <i>nutrition</i>	8. <i>at</i>
	10. <i>motor</i>	
	11. <i>muscles</i>	

Materials Needed: Copies of the puzzle

5. VOCABULARY

1. Exceptional Child--An inclusive term for children with conditions that prevent their functioning according to the demands of their environment. High and low mental abilities, physical handicaps, and emotional disturbances might cause a child to be labeled "exceptional."
2. Gross Motor Movements--Walking, running, jumping, and swimming; requires large muscle development.
3. Fine Motor Movements--Movements with the hands and fingers; requires small muscle development.

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Use "Which Factors Influence Physical Growth" (Figure #42) bulletin board when discussing this topic. Have students add to the choices on the sample design.

Materials Needed: Background, letters, construction paper, markers, cotton for rabbit's tail

EVALUATION

1. Title: Writing Assignment

Description: Describe in writing how the preschooler's appearance is different from the toddler's appearance.

Materials Needed: Paper, pen

2. Title: Pretest

Description: These true-false statements could be used as a basis for an oral pretest.

- false 1. The rate of physical growth increases as children reach the preschool years.
- true 2. At the age of five, the average child stands about 3.5 feet tall.
- false 3. Girls, having more fat tissue than muscle, tend to weigh slightly more than boys.
- true 4. The genes found in the chromosomes of the sperm and ovum cells are responsible for determining a person's physical characteristics.
- false 5. All inherited physical traits cannot be changed by environmental factors.
- true 6. Exceptional children include those with high or low mental ability, physical handicaps, and emotional disturbances.
- true 7. Many exceptional children suffer from overprotection.
- false 8. Chronic illnesses usually have no effect on the growth of children.
- true 9. Gross motor movements include walking, running, jumping, and swimming.
- true 10. In order to learn to write and draw, the child must develop eye-hand and small muscle coordination.

Materials Needed: Paper, pen, above list

Which Factors Influence Young Children's Physical Growth?

HEREDITY

ENVIRONMENT

PHYSICAL
DEFECTS

ILLNESS



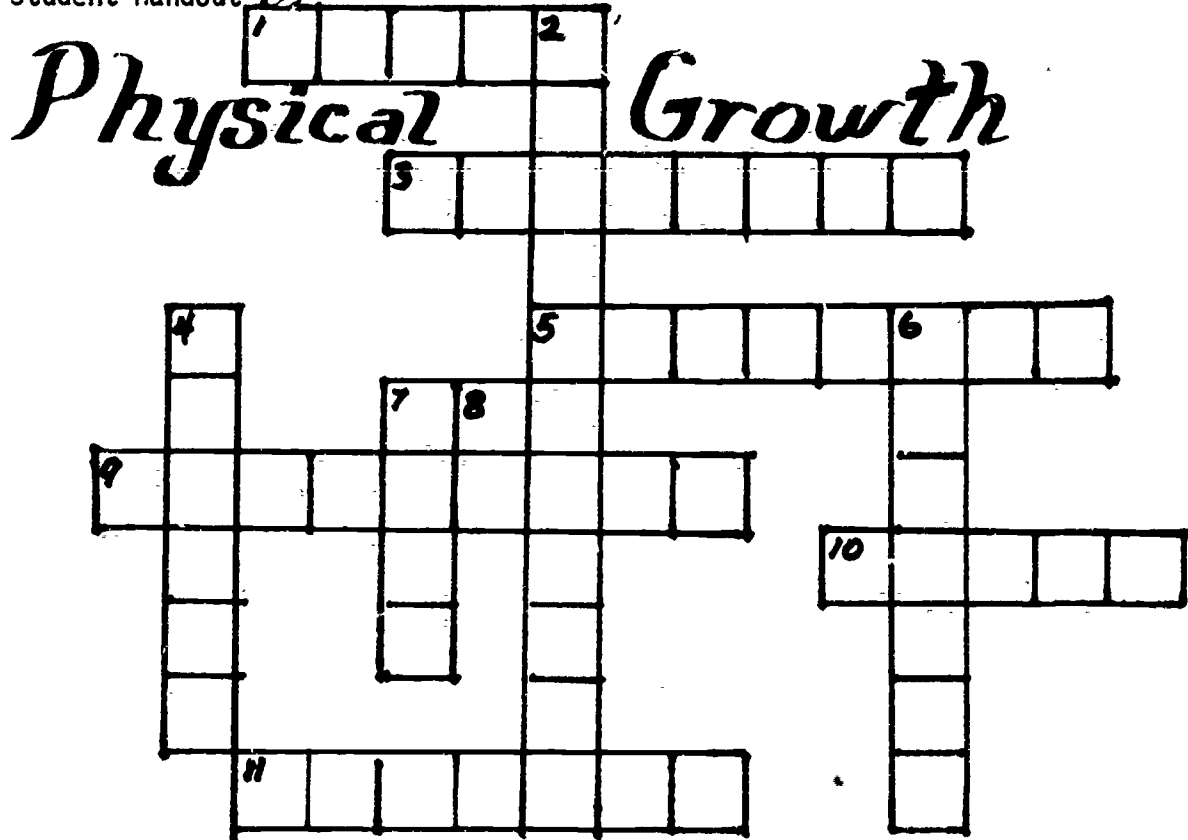
Figure #42

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Physical Growth - Crossword Puzzle
 Student Handout #19



ACROSS

1. Running and jumping require _____ muscle development.
3. Trust and _____ are often conveyed to a child in a physical manner.
5. The rate of _____ growth slows during the preschool years.
7. During the preschool years, the amount of _____ decreases.
9. Growth can be stunted by inadequate _____.
10. _____ skill development requires time, environmental opportunities, and freedom to experiment.
11. Weight gain during early childhood is due to growth in bones and _____.

DOWN

2. _____ children might have high or low mental abilities, physical handicaps, or emotional disturbances.
4. By age five, the average child stands about three and one-half feet, which is over _____ the birth length.
6. _____ illnesses can have an adverse effect on growth.
7. By age five, the average child weighs about _____ times normal birth weight.
8. A preposition

UNIT: Growth and Development of the Preschool Child

CONCEPT: Nutrition and Health Care

GENERALIZATIONS

1. Attitudes toward nutrition and health are developed during childhood.
2. The Basic Four Food Plan is a good guide for planning meals.
3. Nutrition and growth are closely related.
4. Children should have regular and dependable health care.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain the influences of nutrition on physical growth and development of preschool children.
2. List factors that affect food habits of children.
3. State guidelines for planning and scheduling meals and snacks for children.
4. Identify evidences of sound physical health.
5. Identify the major health needs of preschool children.
6. Plan an appropriate menu for two days for three, four, and five year olds.

OUTLINE

- I. Influences of Nutrition on Physical Growth and Development
 - A. Attitudes Toward Food
 - B. Nutritional Needs of Preschool Children
 - C. Function of Food Nutrients
- II. Planning Meals and Snacks
 - A. Basic Food Groups
 - B. Nutritional Snacks
 - C. Quality and Appearance of Food

D. Mealtime Environment

E. Appropriate Scheduling of Snacks and Meals

III. Health Needs

A. Personal Needs and Habits

B. Care of Teeth

C. Communicable Diseases

REVIEW OF SELECTED LITERATURE

In early childhood, attitudes about food that are developed will influence diet patterns and nutritional status throughout life. Children gain knowledge about food from their parents and siblings. As their social worlds broaden, their attitudes are influenced by adults outside the family, television, and children with whom they play. The child's food patterns begin forming long before the parents consciously try to teach their child about nutrition. Parents who have a positive attitude toward food, express pleasure when eating a variety of foods and try to make mealtime an enjoyable experience are building a foundation upon which knowledge of nutrition can later be added. On the other hand, if children are not exposed to a wide range of food choices, if they learn to associate food with unpleasant experiences, such as family conflicts at mealtime or parental scolding, unwholesome attitudes may be formed that will be very difficult to change (McNutt & McNutt, 1978).

Nutritional needs of children are very important, and it is imperative that they be met. The Recommended Dietary Allowances (RDA) is divided into recommended intakes for ages one to three, and four to six years. At least forty-five nutrients have been identified as basic to the maintenance of healthy growth. "Lack of basic nutrients over a period of time may depress appetite, encourage disease, and thus retard childhood growth. Conversely, the child whose growth rate is too slow from non-nutritional causes may also have a small appetite and decreased resistance to disease" (How Children Grow, 1973, pg. 85).

Because of the development of body muscles and tissues during early childhood, it is extremely important that children get an adequate supply of protein. Although adults need to eat proteins that contain eight amino acids, called essential amino acids, a child needs a diet with a ninth amino acid, histidine. By utilizing the amino acids in the proteins they eat, both adults and children then manufacture additional amino acids, resulting in twenty-three amino acids to be used in the various functions of the body.

An adequate amount of calcium and phosphorus is needed in early childhood because of teeth eruption and bone structure. Milk is considered the best source of these minerals and should be made a vital part of each child's diet. The vitamin needs of preschool-aged children can be met if a balanced diet is maintained. Vitamin supplements should not be necessary except for illnesses.

When planning meals and snacks for children, some consideration should be given to the Basic Four Food Groups:

Milk and dairy products: Two to three cups per day. Dairy products such as yogurt, cottage cheese, cheddar cheese, and ice cream may be used sometimes in place of milk.

Meats and protein foods: Two servings of beef, lamb, poultry, fish, pork, or liver. A serving guide is one tablespoon of food for each year of age. This is only a guide and larger or smaller servings may be provided to satisfy the child's individual appetite.

Vegetables and fruits: Four servings are needed to meet requirements. A citrus or other fruit or vegetable high in vitamin C should be included. Dark green and yellow vegetables should also be included for a source of vitamin A. Again, the suggested serving guide is one tablespoon of food per year of age.

Bread and cereals: Four or more servings are needed. One slice of bread or one-half cup of cooked cereal, rice, or macaroni is considered a serving for four to six-year-old children. Meeting the recommendations for this group is not difficult because most of these foods are well accepted by children.

Because children cannot eat large amounts of food at one time, it is necessary to plan for nutritious snacks during the day. Snacks not only give them renewed energy at a time when they need it, but the food may be planned as part of the whole day's nutritional requirement. Nutritional snacks for preschool children might include fruit, juice, milk, dry cereal, crackers, raw vegetables, toast, cheese, sherbet, or ice cream.

Very few preschool children eat three scheduled meals every day. The time and place that a child eats are not of supreme importance in determining the nutritional quality of the diet, but these factors often do affect the kinds of food that make up the total diet. Children who consume relatively large amounts of food while away from the table need special attention to ensure that snacks are not limited to one type of food. Many nutrients will be left out of the diet if cereal products, such as cookies and crackers, are eaten continually as snacks.

Family meals can be a pleasant social experience for children as well as a time to learn about foods and to develop good eating habits. Children are encouraged to eat when they are served foods that are easy to handle. Breads, sandwiches, and raw vegetables can be cut into strips. Meat should be cut into bite-sized pieces. Finger foods and small portions are easy to manage.

A variety of texture appeals to children. A combination of soft, chewy, and crisp foods makes a meal interesting and appetizing for them. The temperature of food is important to children. Most prefer their food at room temperature. Extremes, hot or cold, seem unpleasant (Fleck, 1971).

Children are reasonably good judges of the quality of food served to them. Carefully prepared food that has an attractive appearance, a mild

aroma, and taste appeal will be more acceptable to children. This encourages tasting of new food flavors and textures being offered to them (McWilliams, 1967).

Children enjoy colorful foods, such as brightly colored vegetables, fruits, and gelatin desserts. Color should also be considered in the selection of table mats and eating utensils so the table will appear attractive to children. New foods should be introduced periodically to children, but is not advisable to try more than one at a meal.

Mealtime settings should be geared toward the comfort of children as much as possible. Utensils that are convenient to handle should be large, and flat soup bowls or plates with curved edges are easy to use. Most children will respond favorably to meals served in a relaxed, pleasant atmosphere where they feel comfortable and secure (Fleck, 1971). Chairs that provide safety and comfort are important. It is good to have an eating area free from distractions, such as the television or guests.

Preschool children have many health needs, some of which are listed below (Hutchins, 1979):

1. the right kinds and amounts of foods
2. adequate rest and sleep
3. adequate water and other fluids
4. activities that teach skills
5. good personal hygiene (health) habits
6. protection from illness
7. protection from accidents

Preschool children are capable of doing many things for themselves that contribute to good health. As they grow and develop, they can be taught about health needs and the habits of personal hygiene that are necessary to maintain good health, such as combing hair, taking care of toilet needs, bathing, washing hands, and brushing teeth.

The proper care of children's teeth begins at birth and revolves around proper diet, cleanliness, and dental supervision. A well-planned diet will provide the needed amounts of protein and calcium for the development of healthy teeth. The habit of eating too many highly refined carbohydrates, such as candies, cookies and sweetened cereals, should be discouraged. Cleanliness of the teeth is the primary factor in preventing tooth decay. Children as young as two and one-half years can be taught to brush their teeth. A visit to the dentist is recommended for children who are two and one-half or three years old. The primary teeth are important, not only for speech and chewing, but also for paving the way for permanent teeth. Regular checkups should be scheduled twice a year (Feinbloom, 1975).

Children should also have regular and dependable general health care. The most common illnesses in the three-to-five age group are infectious and contagious diseases. These include chickenpox, rubella, mumps, roseola, strep throat, and pertussis (whooping cough). If the child is in good physical condition and has been administered proper immunizations, these illnesses will probably not become serious; however, none of them should be taken lightly. The illness could be prolonged if proper action is not taken.

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- McWilliams, M. Nutrition for the growing years. New York: John Wiley, 1967.

SUGGESTED READINGS

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- A comprehensive text of nutrition information related to all ages.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- An excellent text that covers all areas of child growth.
- Hutchins, B. Child nutrition and health. New York: McGraw-Hill, 1979.
- Presents basic knowledge of general health and nutritional needs of children from birth to adolescence.
- McNutt, K. W., & McNutt, D. R. Nutrition and food choices. Chicago: Science Research Associates, 1978.
- Presents current knowledge of the science of nutrition.

LEARNING ACTIVITIES

1. Title: Discussion of a child's eating habits.
Description: Discuss a child's eating habits and influences on children's likes and dislikes of certain foods. Use the following questions to stimulate discussion:
 1. A child's attitude about food develops early in childhood. Can you recall an incident that changed your attitude or gave you a particular attitude or feeling about a certain food?

2. Name some influences on children's eating habits today.
3. Do you think that children are aware of the quality of food.
4. Do you feel that color of the food encourages children to eat?
5. Should a child be fed separately from the family? Why or why not?

Materials Needed: None

2. Title: Meal Planning

Description: Plan appropriate menus for two days for a preschool child. Consider nutrition, temperature, color, variety, and flavors.

Materials Needed: Paper, pen

INSTRUCTIONAL AIDS

1. Title: Poster

Description: Draw a poster entitled "Recommended Daily Allowances" (Figure #43) that illustrates the RDA of vitamins for children and the foods in which they can be found.

Materials Needed: Poster paper, markers

2. Title: Transparency Overlay

Description: A transparency overlay illustrating the best way to serve the child's meal could be used in nutrition discussion. "Serving Children" (Figure #44-46) depicts three important considerations when serving a child a meal, which include a bright colored dish; combination of textures; and eating utensils.

Materials Needed: Three transparency sheets, felt-tipped pens, overhead projector

3. Title: Bulletin Board

Description: Prepare a "Weigh Your Child's Nutrition" (Figure #47) bulletin board of scales illustrating how nutritious foods are better balanced than junk foods.

Materials Needed: Background, aluminum foil to make scales, yarn for scales, letters, magazine pictures of foods or food models

EVALUATION

Title: Plan a nutritious menu

Description: Plan a week's menu of nutritious meals for a child.

Include snacks: remember color, texture, and food value.

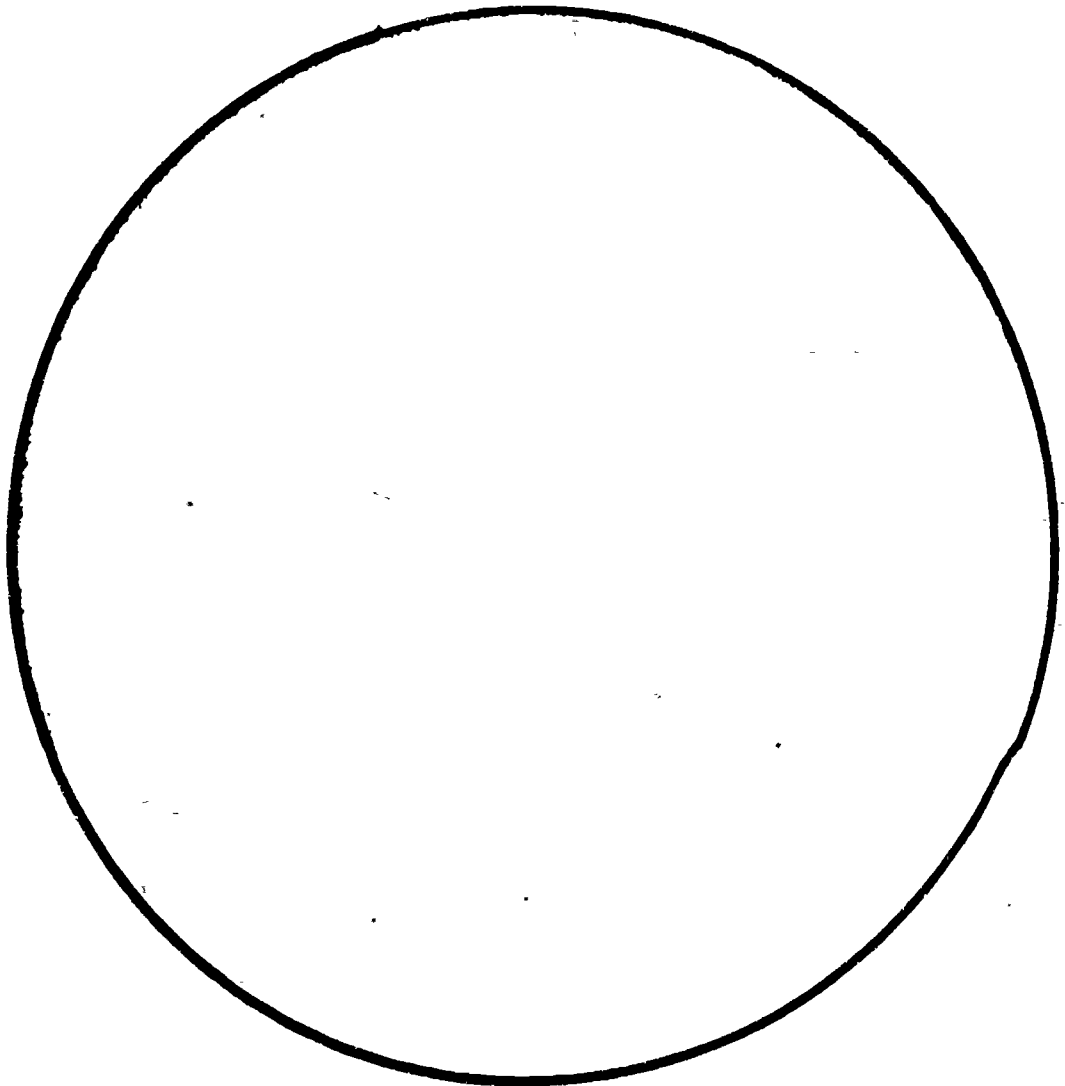
Materials Needed: Paper, pen

RECOMMENDED DAILY DIETARY ALLOWANCES (RDA'S)
4 TO 6 YEARS OLD

CALORIES	1800
PROTEIN	30 GRAMS
CALCIUM	800 MILLIGRAMS
PHOSPHORUS	800 MILLIGRAMS
IRON	10 MILLIGRAMS
VITAMIN A	2500 INTERNATIONAL UNITS
THIAMIN	0.9 MILLIGRAMS
RIBOFLAVIN	1.0 MILLIGRAMS
NIACIN	11 MILLIGRAMS
VITAMIN C	45 MILLIGRAMS

Based on 1980 revisions.

Figure #44



BRIGHT COLORED DISH

291

338

ROUNDED
TIPS



292

339

LOW CUP

- (1) NOT
HEAVY
- (2) ROUND
BOTTOM

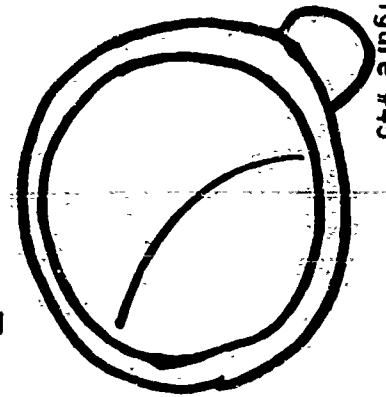
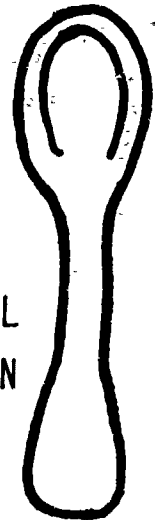


Figure #45

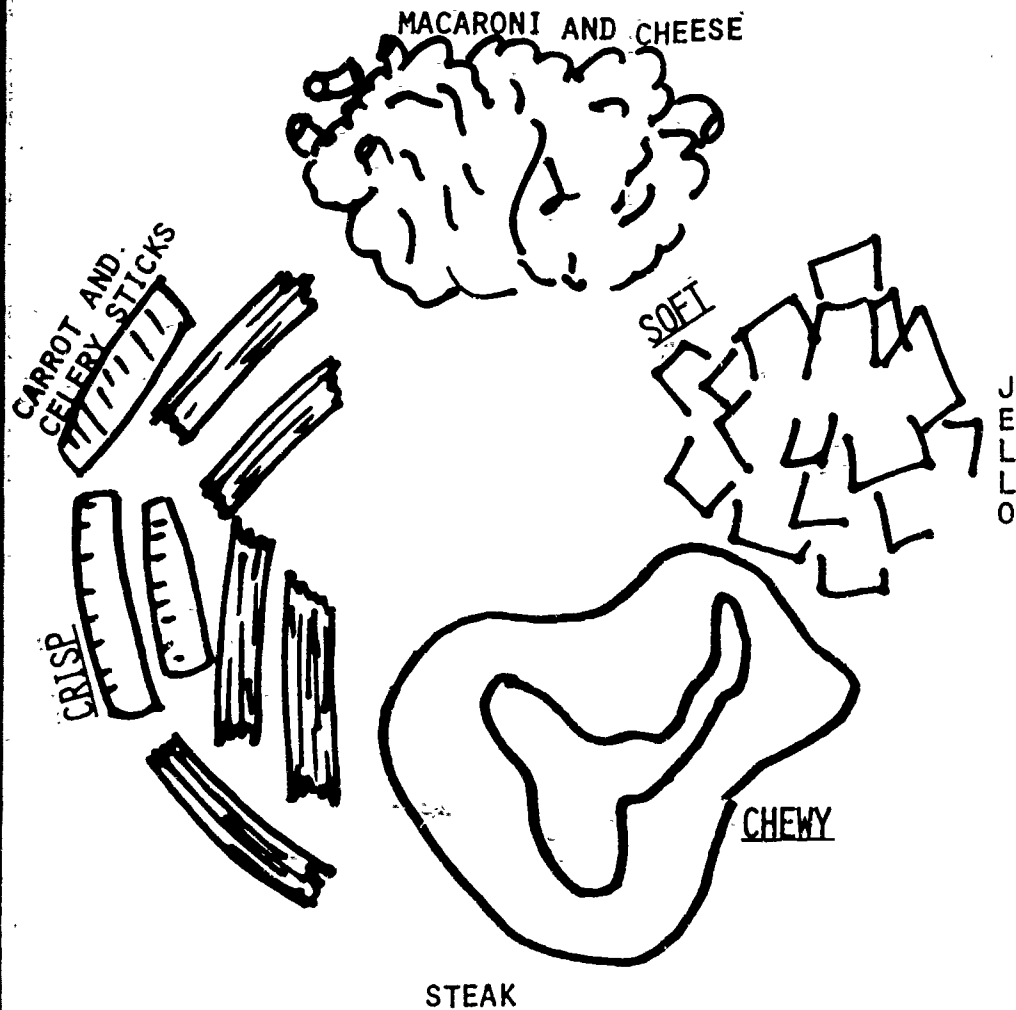
SMALL
SPOON



340

COMBINATION OF TEXTURES

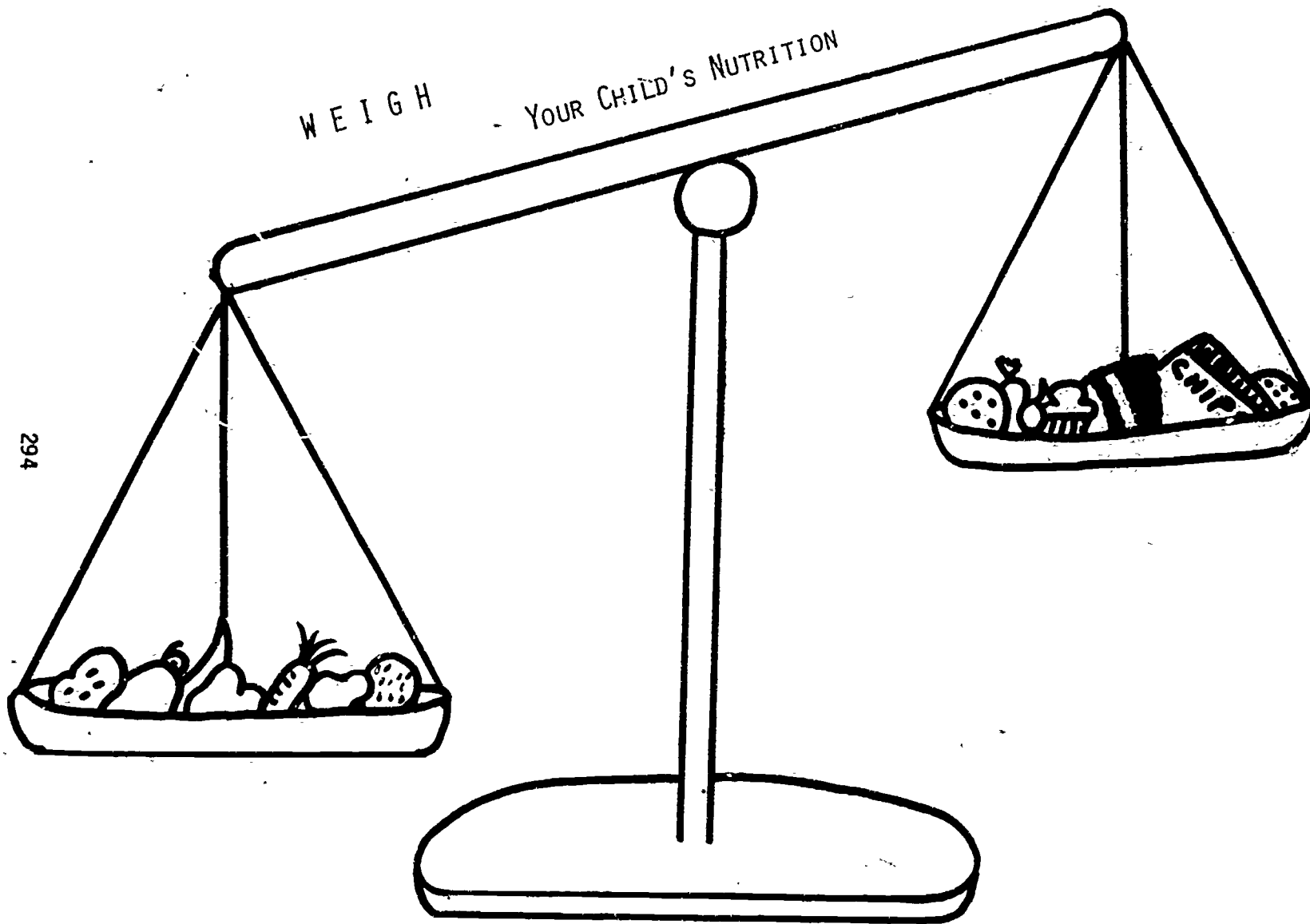
Figure #46



341

WEIGH - YOUR CHILD'S NUTRITION

Figure #47



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UNIT: Growth and Development of the Preschool Child

CONCEPT: Intellectual Development

GENERALIZATIONS

1. Intellectual development proceeds through stages.
2. Memory, reasoning, curiosity, imagination, and concept development are components of cognition.
3. Some factors contributing to intelligence are hereditary and environmental factors, such as socio-economic status, diet, health, and experiences.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Define "intelligence," "cognition," and other terms related to mental development.
2. Describe factors that contribute to intelligence.
3. List some situations that parents can provide to encourage intellectual development.
4. List some characteristics of concept development.

OUTLINE

- I. Intelligence
 - A. Definition
 - B. Benchmarks in Intellectual Growth
- II. Characteristics of Mental Development
- III. Factors Affecting Intelligence
 - A. Heredity
 - B. Socio-economic Status
 - C. Environment
 - D. Experiences

IV. Cognitive Development

- A. Defined
- B. Perception
- C. Memory
- D. Imagination
- E. Concept Formation

V. Piaget's Theory

REVIEW OF SELECTED LITERATURE

Intelligence may be considered a person's ability to acquire, remember, and use knowledge; to understand the relationship between objects, events, and ideas; and to use this understanding in daily life (Papalia & Olds, 1975). Intelligence has also been defined as the ability to think or reason, and to cope with the environment (Ames, 1979).

Intellectual development includes not only how children think, but what they perceive about their world and how they apply this information to solve problems (Norris, 1978). Children do not think in the same manner as adults. Children, rather than being unable to cope with ideas, simply deal with them in a manner peculiar to their own level of development (William & Stith, 1974).

Travers (1977) has suggested that growth in intellectual development is characterized by the following:

1. The child's increasing independence in responding selectively to the immediate external environment.
2. The child's ability to internalize events and recall them.
3. The child's ability to communicate individual feelings or desires through the use of words or symbols.
4. The child's ability to respond positively to guidance and learning experiences.
5. The child's sophisticated use of language and communication skills.
6. The ability to consider several alternatives simultaneously.

The three to five-year-old child thinks in egocentric terms and develops concepts such as age, time, space, relationships, and color. The preschool child cannot see the other person's point of view and cannot separate the real and unreal (Papalia & Olds, 1975).

Ames (1979) reported that people inherit mental capacities, but environmental factors are also important. Such factors as socio-economic status, diet, health, and experiences contribute to the intelligence of a child.

Wei, Lavatelli, and Jones (1971) found that children from middle class families were more advanced than children from working class or poor families. The poor children seemed to lag behind by about one to two years. This lag does not appear until some time after three years of age. Such factors as motivation could account for differences (Bee, 1975).

Children learn by taking information from people, events, and things in the environment, processing and using this information for new behavior. In light of this, the environment and the child's experiences become very important to intellectual functioning (Ames, 1979). Children appear to function better intellectually if they come from homes that have a warm, positive, and democratic atmosphere. Papalia and Olds (1975) state that parents' attitudes are important in the mental development of their children.

As the child grows and develops, he or she receives sensory data and processes it. The child refines the methods of communicating this information in the form of action, feelings, or thought. This process is referred to as "cognition."

New cognitive development is a mental process that involves all aspects of knowledge, thought, and perception. It is dependent upon the symbolic process and includes memory, imagination, and concept formation. All learning begins with a sensory experience, (seeing, hearing, touching, tasting, smelling) that is, when a child perceives something.

The simplest form of cognitive behavior is memory. This includes the recalling and retaining of past experiences. Imagination and concept formation are two more complex forms of cognition. Imagination is the result of combining past experiences and knowledge into possible new combinations. Concept formation requires the child to classify experiences, objects, events, and information into common categories because of similar or common qualities.

In the understanding of intellectual development, many authors seem to rely heavily on studies done by Jean Piaget. Piaget drew two important conclusions from his early observations (Brainerd, 1978). First, it is the quality of the child's thinking, not the quantity that is important. The manner of problem solving, the kind of logic, and the way the child uses information is more important than how many problems a child can solve. Secondly, children of different ages may have different qualities of thinking.

According to Piaget, during the preschool years the child goes through the preoperational stage of cognitive development. The function of representation (the ability to represent something by means of symbols) appears. At this stage, the child confuses reality with make-believe.

He or she engages in symbolic play. Children believe that objects and natural events have human thoughts and feeling, and they explain events in terms of magic. The child is still very self-centered, figures solutions out by guessing, and does not understand that a single thing can look different from another angle (Ames, 1979; Norris, 1978). Because of the child's inability to "decenter" (focus on more than one aspect of an object at a time), reasoning is often distorted. There is rapid conceptual development at this time (Wadsworth, 1971).

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- Westlake, H. G. Children: A study in individual behavior. Lexington, Massachusetts: Ginn and Company, 1977.
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SUGGESTED READING

- Williams, J. W., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan Publishing, 1974.
- Excellent overall book on the school-aged child.

LEARNING ACTIVITIES

1. Title: Crossword Puzzle

Description: "Intellectual Development of the Preschool Child Crossword Puzzle" (Student Handout #20) uses vocabulary words and questions about the intellectual growth of a preschool child.

Key:	Across	Down
	2. <i>Organized</i>	1. <i>Complex</i>
	5. <i>Status</i>	3. <i>Imagination</i>
	6. <i>Intelligence</i>	4. <i>Knowledge</i>
	8. <i>Motivation</i>	5. <i>Sensory</i>
	9. <i>Diet</i>	7. <i>Human</i>
	10. <i>Memory</i>	
	11. <i>Concept</i>	
	12. <i>Egocentric</i>	

Materials Needed: Copies of puzzle

2. Title: Discussion

Description: Recall times when parents or other adults helped to stimulate your intellectual development.

Materials Needed: None

3. VOCABULARY

1. Intelligence--The ability to think or reason and to cope with the environment.
2. Egocentric--Self-centered.
3. Cognitive Development--The process of learning.

INSTRUCTIONAL AID

1. Title: Filmstrip and Review Questions

Description: The filmstrip "Thought" teaches how the thought processes of a child between the ages of three and five develop.

Materials Needed: Filmstrip projector, filmstrip "Thought."

Source: Butterick Publishing, 161 Sixth Avenue, New York, N. Y. 10013 \$250 per set.

2. Title: Transparency

Description: "Overview of Concept Development in Preschool Children" (Figure #48) presents information about the concepts of space, time, size and shape, color, and numbers.

Materials Needed: Overhead projector, transparency materials

EVALUATION

1. Title: Discussion

Description: Write the following words on a transparency; make a cover sheet and reveal them one at a time. Have students discuss how each contributes to the intellectual development of a child.

- A. Heredity
- B. Socio-economic status
- C. Diet
- D. Health
- E. Experience

Materials Needed: Transparency and cover sheet, overhead projector

2. Title: Pretest

Description: The short pretest below on intellectual development could be used before a discussion on this topic. This test could also be used orally as a means of introducing the lesson.

Write the word "true" if the statement is true and "false" if it is a false statement in the blank to the left of each statement.

- True 1. Intellectual development includes how children think, what children see and understand about their world, and how they use the information to solve problems.
- False 2. The preschool child is able to see another person's point of view and can easily separate the real from the unreal.
- False 3. Factors such as socio-economic status, diet, health, and experiences do not contribute in any way to an individual's intellectual capacities.
- True 4. During the preschool years, the child proceeds through the preoperational stage of development.

Materials Needed: Copies of pretest

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Figure #48

OVERVIEW OF CONCEPT DEVELOPMENT IN PRESCHOOL CHILDREN

Age: Three

Space: Can usually tell own address by street name but not by number; still not good at judging distance and may bump into things; understands "over," "long," and "tall."

Time: Has more words to express "future" than "past," but knows "yesterday"; may pretend to tell time, likes play watches; often uses the word "time."

Size and Shape: Can point correctly to four of ten common shapes; great progress in recognizing shapes in everyday things.

Color: May be able to match color cards successfully, but cannot name them.

Numbers: Can give "just one" or "just two"; can count two objects, may be able to count to five.

Age: Three and one-half

Space: Uses words like "under," "near," "between"; interested in appropriate places for objects; has expanding interest on location.

Time: Talks about past, present, future equally; uses past and future tenses, but with some confusion.

Size and Shape: Can point correctly to six of ten common shapes; shows interest in comparative size.

Figure #48-Continued

Age: Four

Space: Much use of expansive words: "far away"; knows meanings of position words like "up" and "under"; enjoys hide and seek; can go on short errands if street crossing is not required.

Time: Adds many new time words; may know the days of the week and months; fairly clear understanding of the sequence of events for a day.

Size and Shape: Can point correctly to eight of ten common shapes; still misjudges own size in relation to objects; understands "big" and "bigger."

Color: Can identify at least one of four colors (red, yellow, blue, green); may be most successful with red; can match six colors.

Numbers: Can point to and count three objects.

Age: Five

Space: Can cross streets that have traffic lights; likes things placed neatly and near each other.

Time: Knows many adult time words; can tell what day it is; knows own age; likes clocks and calendars.

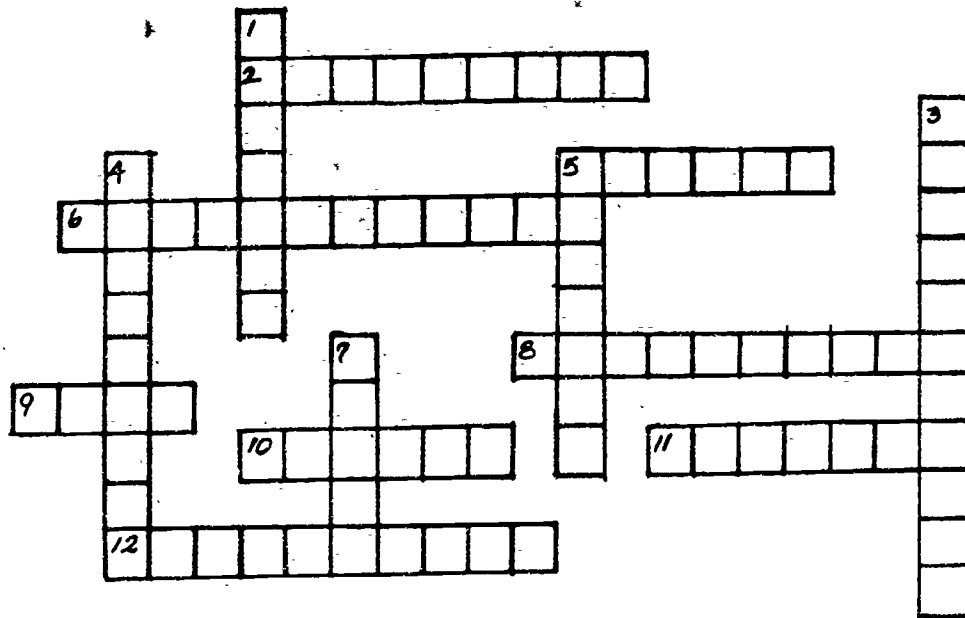
Size and Shape: Points correctly to all ten common shapes; learns meaning of "big," "bigger," "biggest."

Color: Can point to and name four to six colors.

Numbers: Can point and count thirteen objects; can count by ones, usually stopping at nineteen or twenty-nine; can write a few numbers.

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Intellectual Development of the Preschool Child Crossword Puzzle
Student Handout #20



Across

2. Between their third and fifth years, children's thought processes become more _____.
5. Socio-economic _____ can contribute to the intelligence of a child.
6. The ability to think or reason and to cope with the environment.
8. A lack of _____ may be the reason some poor children lag behind middle class children intellectually.
9. Health and _____ contribute to intellectual development.
10. The simplest form of cognitive behavior.
11. _____ formation requires the child to classify experiences, objects, etc. into common categories because of similar characteristics.
12. Self-centered.

Down

1. During the preschool years, a child's thinking becomes more _____.
3. The result of combining past experiences and knowledge into possible new combinations.
4. Intelligence may be considered a person's ability to use _____.
5. Learning begins with _____ experiences.
7. A child often believes that objects and natural events have _____ thoughts and feelings.

UNIT: Growth and Development of the Preschool Child

CONCEPT: Language Development

GENERALIZATIONS

1. Language development is very closely related to intellectual development.
2. Language acquisition follows a developmental pattern.
3. The rapid language acquisition of preschool children is reflected in increases in vocabulary and development of grammatical structures.
4. Language development is influenced by environmental factors.
5. Concept formation influences oral language skills.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Distinguish between speech and language.
2. Outline the developmental sequence of language.
3. Give examples of the effect environment has on speech development.

OUTLINE

- I. Language Development
 - A. Defined
 - B. Factors Affecting Language Development
 - C. Developmental Sequence of Language
 - D. Language Skills

- II. Concept Development
 - A. Defined
 - B. Relation to Language Development

III. Speech Development

- A. Defined
- B. Environmental Influences
- C. Speech Errors
- D. Parental Role

REVIEW OF SELECTED LITERATURE

Language development includes the entire spectrum of the communication process, including speech and concept formation. During the early childhood years, language acquisition is a significant task. As the child begins to acquire a vocabulary and verbalize, he or she discovers that everything has a name and that this information is useful in communicating to others and in problem solving.

Following is a list of the preschooler's language skills (Ames, 1979; Brisbane & Riker, 1971; Draper, Ganong, & Goodell, 1980):

<u>Age of Preschooler</u>	<u>Skills</u>
Three Year Olds	Imposes own meaning to many words Speech is egocentric Vocabulary of 800-1,000 words Mild stuttering and repetition normal Speaks in complete sentences, understands general rules of grammar, i.e., plurals, past tense
Four Year Olds	Vocabulary of 1,500-2,000 words Child asks many questions "Chatterbox stage" Can follow simple commands Uses compound sentences Uses "I" and "Me" correctly

Age of Preschooler

Skills

Five Year Olds

Has approximately ninety percent correct articulation

Not nearly as egocentric as four year old

Some stuttering and stammering may appear at beginning of school because of emotional tension

Vocabulary may include 2,000-2,200 words

Uses complex sentences

A component of language development is the development of concepts such as time, space, quantity and number, size, shape, and color. Concepts are symbolic and abstract (Hurlock, 1972). Children need many types of concrete experiences to develop accurate concepts. The child's play is essential in the development of concepts.

Language ability is one of the most reliable indications of expanding intelligence and one of the hardest skills to learn. Speech is one aspect of language. It is the use of the spoken word. Brisbane and Riker (1971) indicate that through speech the child reveals individual interests, personality traits, the ability to think in problem solving, and basic knowledge.

Hurlock (1978) listed some common errors of pronunciation in early childhood. Parents should understand that some of these errors are normal, but if they become concerned, a doctor should be consulted.

1. Baby talk--If these forms have carried over into the three to five year old, they can develop into habits. These habits can take time to correct. Avoid talking "baby talk" to children, and some of this pattern can be avoided.
2. Lipping--Lipping is saying "wed" instead of "red," "twee" instead of "tree." Sometimes lipping is caused by missing front teeth or spaces between the teeth. If this is the case, parents should consult a dentist. When a child starts to lisp, the parents should be sure to pronounce words distinctly themselves to provide a clear model.
3. Slurring--Slurring is not speaking distinctly or not using the lips, tongue, and jaw correctly. Shyness or over-excitement can cause a child to slur words. The parent can ask the child to repeat what was said more slowly, being sure not to criticize the child. Also the parents should try to make sure the home environment is a calm and pleasant one.

4. Stuttering and stammering--Stuttering is repeating a letter, a syllable, or even a whole word. Stammering is a result of tightening the vocal muscles, causing a locking of speech. Both of these are usually caused by emotional tension or excitement.

Environment has an important effect upon speech. Families that encourage conversation and interaction among members stimulate speech skills of children (Brisbane & Riker, 1971).

Hurlock (1978) also stated some methods that adults can use to encourage good speech development:

1. Set a good example. Remember children imitate what they hear.
2. Encourage children to speak. Listen to children when they talk and ask open-ended questions that stimulate the child to respond.
3. Do not tell the child he or she made a speech error. Instead, repeat the sentence correctly and continue with the conversation.
4. Use family meals as a time to encourage the child to talk and learn to listen to others.
5. Talk to children about a wide range of interesting topics.

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- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

LEARNING ACTIVITIES

1. Title: Taped interview

Description: Compile a list of questions and interview two children in each of the following age groups: three year old, four year old, and five year old. Tape record the interviews. Encourage the children to talk as much as possible. Listen to the tapes in class. Discuss these points:

1. Was there a child who imposed his or her own meaning to words?

2. Was the speech egocentric?
3. Was there mild stuttering? Severe stuttering?
4. Did any of the children ask questions of their own?
5. Were there any "chatterboxes"?
6. Did the children use plural and past tenses correctly?

Materials Needed: Tape recorder, list of questions

2. Title: Brainstorming

Description: Brainstorm for ideas that would encourage good speech development. The following might be some ideas discussed:

1. Set a good example.
2. Choose books and television programs that set a good example.
3. Encourage children to speak.
4. Use family meals as a time to encourage the child to talk and learn to listen to others.
5. Talk to children about a wide range of interesting topics.

Materials Needed: None

3. VOCABULARY

1. Lisping--Inability to pronounce words distinctly, such as saying "wed" instead of "red."
2. Stuttering--Repeating a letter, a syllable, or a whole word.
3. Stammering--A locking of speech caused by a tightening of the vocal muscles.

INSTRUCTIONAL AID

Title: Transparency

Description: Make a transparency entitled "Preschool Language Skills" (Figure #49). This figure would be suitable for an overlay transparency.

Materials Needed: Transparency sheets, overhead projector

EVALUATION

Title: Test

Description: The following true-false and multiple choice test could be used as a basis of evaluating student progress.

Write "true" or "false" in the blank beside the number of the question.

- false 1. During the early childhood years, language acquisition is not a significant task.
- true 2. A three year old imposes meaning to many words.
- false 3. A four year old cannot follow simple commands.
- true 4. Concepts are the result of linking sensory experiences together.
- true 5. Language ability is one of the hardest skills to learn.
- false 6. Environment does not have an important effect upon speech.
- true 7. One should always use family meals as a time to encourage the child to talk and learn to listen to others.
- false 8. One should not talk to children about a wide range of topics because they cannot understand them anyway.

Choose the answer you feel is most appropriate. Write the letter in the blank.

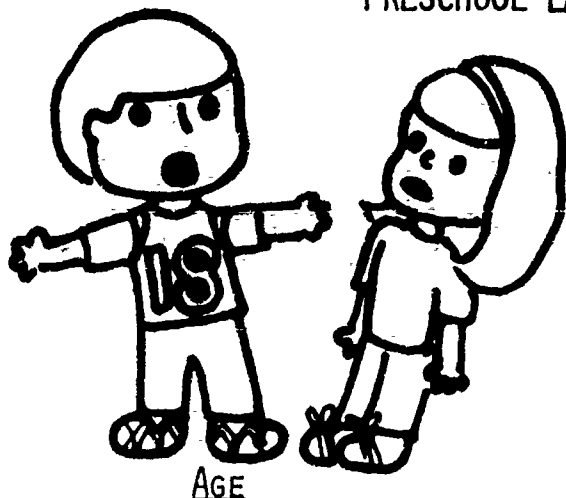
- A 9. The child discovers that everything has a name. This information is
- A. useful
 - B. only confusing
 - C. a waste of time
- D 10. A four year old will
- A. ask lots of questions
 - B. be a "chatterbox"
 - C. use "I" and "Me" correctly
 - D. all of the above
- B 11. To develop concepts, children need
- A. lots of rest
 - B. many experiences
 - C. an adequate amount of money

- C 12. Language ability is a reliable indication of
- A. a spoiled child
 - B. a neglected child
 - C. expanding intelligence
- C 13. When correcting speech errors
- A. make an issue of the mistake
 - B. do not continue the conversation
 - C. utilize the method of extension
 - D. A and B above
- B 14. In five year olds, some stuttering and stammering may appear
- A. when the child goes swimming
 - B. when the child starts school
 - C. when the child talks to adults
- D 15. Concepts are
- A. symbolic
 - B. abstract
 - C. expensive
 - D. A and B above

Materials Needed: Copies of the test

Figure #49

PRESCHOOL LANGUAGE SKILLS



AGE

SKILLS

3 YEARS OLD

1. IMPOSES OWN MEANING TO MANY WORDS.
2. EGOCENTRIC SPEECH
3. VOCABULARY--1,000 WORDS
4. MILD STUTTERING AND REPETITION NORMAL.

4 YEARS OLD

1. VOCABULARY--1,000 - 1,500 WORDS
2. ASKS LOTS OF QUESTIONS
3. "CHATTERBOX" STAGE
4. CAN FOLLOW SIMPLE COMMANDS
5. USES PLURALS AND PAST TENSES.
6. USES "I" AND "ME" CORRECTLY

5 YEARS OLD

1. APPROXIMATELY 90% CORRECT ARTICULATION.
2. NOT NEARLY AS EGOCENTRIC AS 4 YEAR OLDS.
3. SOME STUTTERING AND STAMMERING MAY APPEAR AT BEGINNING OF SCHOOL BECAUSE OF EMOTIONAL TENSION.
4. VOCABULARY--1,500 - 2,200 WORDS

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UNIT: Growth and Development of the Preschool Child

CONCEPT: Guidance

GENERALIZATIONS

1. Guidance of children toward accomplishment of the developmental tasks of their age and toward fulfillment of their basic needs can affect all aspects of their development.
2. Some approaches to guidance are more developmentally sound than others.
3. The personality of the person doing the guidance can affect its effectiveness.
4. Guidance is teaching, helping another person toward self-direction and inner-control.
5. Guidance techniques require sensitivity to children's needs and vary depending on the age of the child.
6. Children feel more comfortable when parents care enough to help them achieve self-discipline.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain the relationship of guidance, discipline, nurturance, punishment, and reward.
2. Tell how guidance approaches can facilitate developmental task accomplishment and basic needs fulfillment.
3. List some psychologically damaging guidance approaches and suggest alternatives that are more developmentally sound.
4. Explain how personality affects guidance styles.
5. Suggest appropriate guidance approaches to given situations involving children.

OUTLINE

- I. Guidance
 - A. Nurturance
 - B. Discipline

II. Guidance Styles

- A. Authoritarian
- B. Laissez-faire
- C. Democratic or Developmental

III. Guidance Techniques

- A. Reasoning Together (Family council)
- B. Logical or Natural Consequences (Punishment fits the "crime")
- C. Verbal Appeals (Scoldings)
- D. Deprivation or Isolation (Loss of privilege or "banishment," as to bedroom)
- E. Corporal Punishment (Spanking or slapping)
- F. Psychologically Damaging Techniques

IV. Guidance as a Function of Personality

- V. Needs for Guidance

REVIEW OF SELECTED LITERATURE

Guidance is the broad term given to helping others toward some goal. In the case of children, the aim of guidance is toward the time they will be self-guiding or self-directing in their behavior and life choices. Guidance involves nurturance, which includes love and affection and encouragement toward goals. Guidance also involves the area of discipline, which implies standards for behavior, rewards for achievement of standards, and punishments or penalties for willful failure to meet standards. "Discipline" denotes the idea of control, at first by others, later of one's self. Some people equate discipline with punishment, but this connotative definition is not its true meaning (Williams & Stith, 1980).

There are three general styles of guidance. Authoritarian involves rigid restraints, use of external force and control of behavior, and often severe punishment. This type of guidance came to America from Europe. The child typically is not involved in decisions concerning standards or consequences of behavior. Some children lose respect for authority and even rebel under this style.

The laissez-faire style represents the other extreme in guidance, where no standards, punishments, or direction are given the child. It is based on the theory that children need to discover right and wrong and have full freedom of expression. Under this style, children are sometimes left to grope through problems far beyond their resolving

abilities. This style may be a rejection of a parent's being reared under the authoritarian style or an abdication of parental responsibility for the child's actions.

The developmental or democratic style is rooted in the notion that children need to be involved in decisions that affect them and recognizes their right to help govern themselves. Children are helped to set standards for behavior and to evaluate their own performance. This style involves penalties for willful misconduct, but usually not physical punishment. The educational rather than the punitive aspect of guidance is emphasized, and it is this style that most professionals in the child development field espouse.

There are a host of techniques that may be used in the varying styles of guidance. Reasoning together in a family council is a recommended one, involving setting standards, evaluation in terms of them, and setting penalties and rewards (Allred, 1968). Another technique involves letting the punishment fit the misbehavior, called "logical or natural consequences." In this approach, parents realize that much misbehavior will involve built-in penalty: playing with the stove results in burned fingers; being late for supper means going to bed hungry. Those who follow this technique try to structure penalties that are related to offenses when the punishment is not built-in: quarrelling with friends results in not playing with them for a while; breaking a toy in anger results in being without that toy for a period of time (Dreikurs & Gray, 1970).

Verbal appeals or threats or promises are a common method used by parents. By and large, these approaches may have little lasting effect and may result in the right action for the wrong reason.

Deprivation or isolation, loss of privilege or banishment to one's room are other alternatives in helping children adhere to standards. During middle childhood, a child's being removed from activity with peers may be a very strong motivator to do right. Allowing a child "time out" to regain emotional control may be achieved in this way. Providing time to think about one's own behavior is also a product of isolation.

Corporal punishment, spanking or slapping, is probably the method most often used by parents. But its effectiveness is questionable after age two, at which time children can learn to respond to other methods. There is always the danger of actual physical harm because most corporal punishment is administered in anger. The child is likely to associate the pain with the person administering the punishment, not the misbehavior. And corporal punishment constitutes a direct assault on one's person, which could be damaging to the self-concept. This method has no carry-over into adult life, and it is neither developmentally nor psychologically sound.

Withdrawing love from, frightening, and shaming an offending child are among the most psychologically damaging methods applied to achieve compliance with standards of behavior. All the work toward fulfillment of basic needs and establishment of self-worth is in peril when these

techniques are employed. The side-effects are numerous, and the advantages are nil.

Parents tend to employ guidance that is an extension of their own personalities and similar to the guidance they received in their childhood. Kagan (cited in Talbot, 1974) found that children do not have to receive a scheduled or fixed amount of reinforcement or discipline to become gratified and productive adults. There is no fixed list of parental behaviors which can guarantee that children will be well-adjusted. But the use of praise and reason has been found more often among parents with warm, rather than hostile personality dimensions. Becker (cited in Hoffman, 1964) found that hostile parents tend to produce aggressiveness and resistance to authority in their children, while warm parents seem to foster acceptance of self-responsibility. Permissive parents seem to rear children who are more independent and assertive, and restrictive parents seem to rear children who are well-controlled, but may have inhibited hostile, fearful, dependent attitudes.

Children need guidance that moves them toward inner-control and fosters good moral judgment. Guidance helps them learn to manage stress and pressure. It fosters independence and acceptable sociable behavior and emotional control. Their need for guidance results from their being emotionally immature, curious, creative, and of high energy, as well as out of their desire for independence. Most misbehavior is accidental and a result of poor judgment, rather than planned and intentional. Parents who realize the cause of misbehavior can often deal with it more effectively than those who do not seek to know its roots. Some misbehavior is intentional, to strike back at perceived injustices, to gain attention, or to test power over adults.

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- Allred, H. Mission for mother. Salt Lake: Bookcraft, 1968.
- Dreikurs, R., & Gray, L. S. Parents' guide to child discipline. New York: Hawthorn, 1970.
- Hoffman, W. Review of child development research (Vol. 1). New York: Sage, 1964.
- Talbot, A. Raising children in modern America. Boston: Little-Brown, 1974.
- Williams, J., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan, 1980.

LEARNING ACTIVITIES

1. Title: Graphics and Discussion

Description: Give each student a sheet of newsprint (14" x 14") and 1 color crayon. The teacher will then say, "Please write on your paper, in one word, your feelings when your parents spanked

you as a small child." The class would display their pieces of paper. Discuss discipline, punishment, and positive guidance.

Materials Needed: Newsprint, crayons

2. Title: Survey

Description: Survey children three to six, or parents of these children, to find out the most commonly used guidance techniques. Inquire as to techniques children and/or parents feel are most effective.

Materials Needed: None, unless a survey form is developed

3. Title: Research Assignment

Description: Select one of the following guidance techniques: Family Council (Reasoning together); Logical or Natural Consequences; Verbal Appeals (Scolding); Loss of Privileges; Banishment or Isolation; Corporal Punishment; Frightening or Shaming. Read three or four child development and parenting books and summarize information found about the chosen technique. In class, be able to contribute to a discussion on guidance techniques.

Materials Needed: Child development and parenting books

4. VOCABULARY

1. Guidance--The broad term that means to help others toward some goal.
2. Discipline--Standards for behavior; includes punishment and reward; control.
3. Nurturance--Love, affection, and encouragement toward goals.
4. Punishment--Penalty for willful failure to meet standards.
5. Corporal Punishment--Physical punishment for misbehavior.
6. Reward--To encourage good behavior by giving praise; something is given in return for good behavior.

INSTRUCTIONAL AID

Title: Transparency

Description: Make a transparency entitled "Using Developmental Guidance" (Figure #50).

Materials Needed: Transparency, overhead projector

EVALUATION

Title: Writing Assignment

Description: React in writing to one of the following:

- A. Define the terms--guidance, discipline, punishment, and rewards--and describe how these terms are related.
- B. Explain how personality affects guidance styles.
- C. Tell what causes children in middle childhood to "misbehave."

Materials Needed: Paper, pen

Figure #50

USING DEVELOPMENTAL GUIDANCE

1. BE SENSITIVE TO CHILDREN'S NEEDS AND VALUES.
2. GIVE CHOICES WHENEVER POSSIBLE.
3. SUGGEST SUBSTITUTES.
4. AVOID DIRECT COMMANDS WHERE POSSIBLE.
5. SHARE THE WORK.
6. USE KEY WORDS TO HELP A CHILD COOPERATE.
7. SET UP ROUTINES.
8. KEEP BREAKABLE, EXPENSIVE OR HARMFUL OBJECTS AWAY.
9. KNOW THE DIFFERENCE BETWEEN SPOILING AND RECOGNIZING LIMITATIONS.
10. SPEAK IN A FRIENDLY MANNER.
11. AVOID A BATTLE OF WILLS WHEN POSSIBLE.
12. PLAN AHEAD.

UNIT: Growth and Development of the Preschool Child

CONCEPT: Emotional Development

GENERALIZATIONS

1. Emotional development is the result of maturation and learning.
2. Common emotions of childhood are fear, shyness, worry, anger, jealousy, grief, affection, and joy.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Describe how emotions develop.
2. Identify several emotions and describe how children express each emotion.

OUTLINE

I. How Emotions Develop

A. Maturation

B. Learning

1. Trial and error
2. Imitation or modeling
3. Conditioning

II. Common Emotional Patterns and Responses

A. Fear

1. Shyness
2. Worry

B. Anger

C. Jealousy

D. Grief

E. Joy

F. Affection

REVIEW OF SELECTED LITERATURE

Emotion has been defined as a "mental state that brings about the expression of how one feels" (Draper & Draper, 1975, p. 201). All emotions play an important role in life and help an individual make personal and social adjustments. Individuals generally experience a wide range of emotions. An emotion is not positive or negative, but the behavior that results from an emotion may be evaluated as positive (appropriate) or negative (inappropriate) behavior. Ideally all emotions are directed into wholesome patterns of expression and therefore lead to good adjustments.

In general, three kinds of learning contribute to the emotional development of a child. These are trial-and-error learning, where a child learns to express his/her emotions in the ways that give the greatest satisfaction; learning by imitation or modeling, where the child observes and follows the behavior of others; and conditioning, whereby objects and situations which at first fail to call forth emotional responses come to do so later as a result of learning by association. Because of the influence of maturation and learning on emotional development, the emotions of young children will differ markedly from those of older children and adults. Young children may be labeled as "immature" when adults fail to recognize these individual differences. Because individuals differ in maturational level and learning opportunities, adults should not expect all children of a given age to have similar emotional patterns (Hurlock, 1972).

After the early months of babyhood, different emotional patterns emerge. One of the emotions is fear. Most fears are learned, but not all are learned in the same way. Some are developed through direct association of experiences with stimuli that naturally arouse fear, such as loud, harsh noises. Some children learn fear through imitation; for example, fear of thunderstorms is learned by imitating the fear behavior of a parent or playmate. Fear also develops after an unpleasant experience. Finally, fear may come from frightening experiences depicted on television, in movies, or in fairy tales. "Young children are afraid of more things than either the baby or the older child" (Hurlock, 1972, p. 191). A young child may respond to fear by crying, hiding the face, and hiding behind a person or object. However, because of social pressure, these overt fear responses are curbed as the child grows older (Gilley & Gilley, 1980; Hurlock, 1972; Westlake, 1973).

Shyness is a form of fear aroused by people. Shyness comes from uncertainty about how others will react and fear that they will laugh. It is fear of the unfamiliar that gives a rise to shyness. Most children will experience shyness on certain occasions. They may be shy in the presence of a guest in the home, a new baby-sitter, or when reciting, singing, or participating in a school play. Shyness may be expressed by blushing, by stuttering, by talking as little as possible, by nervous mannerisms, or by making oneself as inconspicuous as possible by dressing like everyone else and by speaking only when spoken to (Hurlock, 1972).

Worry is an imaginary fear. It comes from imagining dangerous situations that could arise. It is usually an illogical exaggeration of what

is likely to happen in specific situations. Many worries come from the mass media--books, movies, radio, and television. Other worries come from the warnings parents use to control children's behavior. Young children may express their worries by discussing them with someone else who they think will be sympathetic, through facial expression, or they may internalize their worries by thinking about them and exaggerating them out of proportion (Hurlock, 1972).

Anger is a frequent emotional response in childhood. Children discover at an early age that anger is an effective way to get attention or satisfy desires. Preschool children respond with angry outbursts to minor physical discomforts and interference with physical activities. They especially dislike interference with their possessions. Anger is sometimes aroused when they make mistakes in what they are doing or when toys or other objects do not work as they want them to. Children express their anger in two ways: impulsive responses and inhibited responses. Impulsive responses are aggressive actions directed against persons, animals, or objects. Young children may have violent outbursts of anger or temper tantrums. Inhibited responses are kept under control, and the child may withdraw into the inner self. Anger may be shown by feeling sorry for oneself, threatening to run away, sulking, or by self-inflicting pain (Gilley & Gilley, 1980; Hurlock, 1972; Read, 1976).

"Jealousy is a normal response to actual, supposed, or threatened loss of affection" (Hurlock, 1972, p. 200). The jealous child is afraid of losing the affection of a loved one and feels insecure. Young children often become jealous when a new baby is brought into the home or when parents seem to play favorites. Jealousy also develops when children feel they are being deprived of material possessions. Children may express jealousy either by attacking a person or by attempting to win that person's favor. Young children often display aggressive behavior when jealous (Gilley & Gilley, 1980; Hurlock, 1972; Westlake, 1973).

Grief is an emotional response resulting from the loss of something loved. The more the child was dependent upon the lost object, animal, or person, the greater the grief. A typical grief reaction is crying. Sometimes the crying may be so prolonged the child enters a state of near hysteria that lasts until the body is physically exhausted. If the child interprets the grief as punishment for misbehavior, he/she may respond with overt expressions of anger. Children may also respond to grief by refusing to eat, showing a lack of interest in their surroundings, experiencing fearful dreams, sleeplessness, and a general listlessness (Hurlock, 1972).

Among preschool children, the pleasant emotions of joy and happiness come mainly from activities in which others are involved, primarily children. Children express their happiness in motor activities, such as jumping up and down, clapping their hands, hugging someone or something, and laughing with glee. Joy is accompanied by a smile and a general relaxation of the entire body (Hurlock, 1972).

Affection is an emotion directed toward people, animals, or objects. It may take a physical or verbal form. Young children show affection by hugging, patting, stroking, or kissing the loved person or object.

Kissing is less frequent than hugging or patting, though children like to be kissed. Young children want to be with and assist the loved person constantly (Draper, 1975; Hurlock, 1972; Westlake, 1973).

The development and expression of emotions are important to children. Without them, they would never experience and express wholesome feelings. Those who care for children have the challenging task of showing them, by example, ways to express emotions effectively.

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- Hurlock, E. B. Child development. New York: McGraw-Hill, 1972.
- Read, K. H. The nursery school. Philadelphia: W. B. Saunders, 1976.
- Westlake, H. G. Children: A study in individual behavior. Lexington, Massachusetts: Ginn and Company, 1973.

SUGGESTED READINGS

- Gilley, J. M. & Gilley, B. H. Early childhood development and education. Albany, New York: Delmar, 1980.

An excellent text covering all areas of the development of the child.

- Hurlock, E. B. Child development. New York: McGraw-Hill, 1972.

A good general text covering all areas of the development of the child.

- Munsinger, H. Fundamentals of child development. New York: Holt, Rinehart, & Winston, 1975.

A textbook about the development of a child from the moment of his/her inception through the period of adolescence.

LEARNING ACTIVITIES

- i. Title: Graffiti Board

Description: Use a chalkboard and colored chalk or a large piece of paper and color crayons; have the students, as they come in, write down one word to describe their day so far. Let this activity lead into a discussion on emotions and how they develop.

Materials Needed: Chalk or crayons, chalkboard or large sheet of paper

2. Title: Writing Assignment

Description: Students should define "emotion" in their own words. Give a time limit of 10 minutes.

Materials Needed: Paper and pen

3. Title: Slides

Description: Make slides using an instant or thirty-five millimeter camera. Find children with different expressions on their faces. Show the slides and react to the pictures.

Materials Needed: Camera, film slide projector

4. VOCABULARY

1. Emotion--A mental state that brings about the expression of how one feels.
2. Shyness--A form of fear in which the child is uncertain of how other people will react.
3. Jealousy--Fear of losing the affection of a loved one or being deprived of a material possession.
4. Grief--The emotional response resulting from the loss of something loved.

EVALUATION

1. Title: Pretest and post-test

Description: The following eight questions are to be used as a pre-test and a post-test to evaluate the students' knowledge of the subject.

Write "true" or "false" in the blank beside the question.

True 1. All emotions play an important role in life.

False 2. The emotions of young children do not differ markedly from those of older children and adults.

True 3. One emotion is fear; most fears are learned.

True 4. Shyness is a form of fear aroused by people.

False 5. Worry is not an imaginary fear.

False 6. Young children typically do not have violent outbursts of anger or temper tantrums.

True 7. The jealous child is afraid of losing the affection of a loved one and feels insecure.

False 8. Affection is an emotion that is not directed toward people.

Materials Needed: Copies of the test

2. Title: Attitude Question

Description: Ask each student to evaluate his or her emotional level by answering this question: How do you feel your emotions and emotional level are different from those of a preschool child?

Materials Needed: Paper and pen

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UNIT: Growth and Development of the Preschool Child

CONCEPT: Self-Concept Development

GENERALIZATIONS

1. Adults help lay the foundation for building positive self-concepts in children.
2. Adults can guide young children in self-concept development by recognizing and accepting a child's feelings.
3. Children must express feelings in order to feel secure and confident.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain what is meant by self-concept.
2. Cite at least three examples of how adults influence the development of a positive self-concept in young children.
3. Describe two ways to help children express their emotions.

OUTLINE

- I. Definition
- II. Recognizing the Child's Feelings
 - A. Behavior
 - B. Speech
 - C. Insecurity
- III. Accepting the Child's Feelings
- IV. Building Confidence Through Self-Expression

REVIEW OF SELECTED LITERATURE

The self-concept is the sum total of the unique perception an individual has of himself/herself. The way children view themselves is a result of treatment by and responses from others, and by feedback from their emotions, actions, statements, and observations (Westlake, 1973). The self-concept is important because it influences an individual's actions in situations. If a child's first experiences have built security and confidence because needs were satisfied, and if favorable responses were obtained from people, a firm

foundation for confidence and security has been laid. If, on the other hand, the child's needs have not been satisfied and favorable responses have not been obtained, insecurity and inadequacy will have been experienced.

Because of a highly competitive society, parents feel the pressure for their children's accomplishment. They tend to push children on, rather than allowing them to take time to satisfy their needs in each stage of development. This may cause a child to feel less secure and more defensive (Read, 1976; Smart & Smart, 1978).

During the early years, parents significantly influence the child's growing self-concept in three basic ways:

1. Parents are primary models, and their behavior is imitated by the growing child. They influence the child's sense of belonging, of competence, and of worth through their treatment of the child.
2. Parents, as primary feedback agents, reveal to the child how his or her behavior is accepted by others.
3. Parents serve as the primary feedback agents for evaluating the child's behavior. (Felker, 1973).

Sometimes adults make children feel guilty. A child may enjoy an experience, such as playing in the mud or exploring a dresser drawer, only to find that the act is considered naughty by the adult. Because children do not understand adult values and because they have a need to please adults, a reprimand of this nature may cause feelings of uncertainty about themselves and their behavior. If children think their mistakes are much more serious than they are, guilt feelings may begin to build up. When this happens, their feelings of confidence and trust in themselves may become damaged (Draper & Draper, 1975; Read, 1976).

Adults need to identify children's feelings in order to be helpful to them. Children reveal their feelings through behavior and often act as they feel. Children's feelings may be seen in the way they walk, run, hold their hands, in their posture, etc.

Children also give clues to their feelings through voice quality and speech. One child may talk very little, although another will chatter almost constantly. Both of these extremes may be a reaction to strains and pressures, which are making them feel less confident and less secure.

Children who feel insecure are likely to face a new or difficult experience by defending themselves. The secure child finds it easy to be friendly and can share with others because loss is not feared.

Thumbsucking may be another sign of insecurity. The strain of having to live up to excessive demands may cause children to turn to an infantile source of comfort, such as their thumbs. Adults should not

try to take away this source of comfort, but should try to make the child's life simpler and more comfortable. The child should be offered a greater chance for feeling secure and adequate so that other kinds of satisfaction may be sought. If the child is forced to stop thumbsucking, some other source of comfort will be practiced, such as nailbiting or masturbating.

After children show how they feel, the adult must learn to accept their feelings and not express condemnation (Felker, 1973). Although a particular behavior may not be approved of by the adult, children have the right to feel as they do and need to learn effective ways of expressing feelings. Acceptance very often makes children less defensive about their fears, anger, or hostility.

Children need help in expressing their feelings and putting them into words. In communicating with a child, one should try to preserve self-respect, and statements of understanding should precede statements of advice or instruction. The following chart contains some typical preschool behaviors and adult responses that can help build confidence in children and help them to like themselves (Westlake, 1973).

INCIDENT	QUICK RESPONSE	BETTER RESPONSE
Three year old is terrified of thunder.	<p>"There's nothing to be scared of; it's just a loud noise." "It can't hurt you; it's just clouds banging together." "Am I scared? Of course not!"</p>	<p>"I know it sounds very scary to you; come sit in my lap." "Almost every child your age gets frightened by thunder-- it's a kind of angry sound, isn't it? But I promise it won't hurt you."</p>
Four year old at beach is terrified of going into the water.	<p>"Come on. Daddy will hold you up; there's nothing to be scared about." "Don't be such a baby--the water is not going to bite you." "Would I let anything happen to you?"</p>	<p>"Play at the edge for awhile, honey, until you can see how shallow the water is." "Let me know if you want me to hold your hand." "Maybe later you'll want to go into the deeper water with me. You let me know when you're ready."</p>

INCIDENT

QUICK RESPONSE

BETTER RESPONSE

Five year old wets his bed.

"Oh, goodness. I hope that is not going to start again!"
"Try to get up and go to the bathroom next time."
"See--I told you not to drink so much water last night!"

"Gee, I guess you were pretty tired, or maybe feeling a little upset. You can't help it--it just happens. When you're feeling relaxed and good, it will just stop by itself."

Three year old won't share wagon on playground when told to.

"That's very selfish; Jimmie won't want to play with you anymore."
"I'm surprised at your being so selfish--I thought you were such a nice little boy."
"If you're mean like that, your friends won't let you play with their toys."

"I know it's hard for you to give Jimmie a turn, but it's fair because he let you ride his bike. Let's you and me play, or we'll count five minutes on my watch and Jim will give it back."
"I'm sorry, Jim; Ken isn't ready to share the wagon yet. Maybe tomorrow he will, because he likes to play with you."

Four year old cries on the first day at nursery school, and mother has to stay.

"I don't know what's gotten into you--you stay with Grandma and sleep at John's house--why should you cry now?"
"There's nothing to cry about--look at all the other children--they let their mothers go home--why are you acting like a baby?"

"Lots of kids are scared on the first day of school--everything seems so strange. I'll stay for awhile, until you get to know your teacher."
"I remember I cried when I first went to school. I know it's a little frightening, and I will stay for awhile. Then I have to leave, but it's all right for you to cry a little--the teacher understands that some children feel a little sad on the first day of school."

(Westlake, 1973, pp. 164-167)

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- Read, K. H. The nursery school. Philadelphia: W. B. Saunder, 1976.
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LEARNING ACTIVITIES

1. Title: Role Playing

Description: Pick an emotion of childhood and pantomime it for the class. Discuss the effect of each emotion on a child's self-concept and how the students feel a parent would react.

Materials Needed: None

2. Title: Interviews

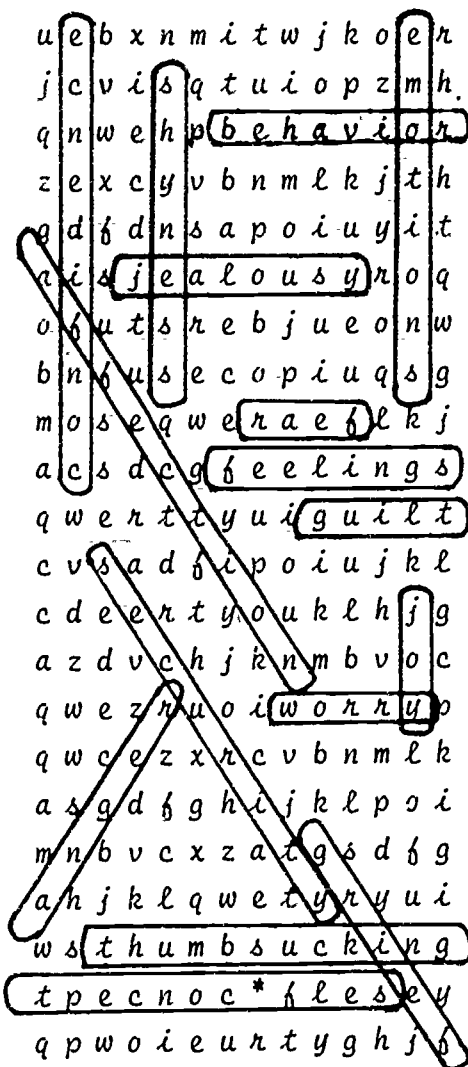
Description: Tape record interviews with several parents of preschool children. Find out how their children show feelings of insecurity. (Examples: thumbsucking, talking too much or too little) How do the parents react when the child shows these signs of insecurity? Listen to tape in class and discuss.

Materials Needed: Tape recorder

3. Title: Word Search

Description: Use the "Self-Concept Word Search" (Student Handout #21) when discussing this topic.

Key: Word Search



1. confidence
2. shyness
3. emotions
4. behavior
5. jealousy
6. grief
7. affection
8. feelings
9. fear
10. guilt
11. joy
12. worry
13. security
14. anger
15. thumbsucking
16. self-concept

Materials Needed: Copies of Word Search

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Use a transparency entitled "Self-Concept" (Figure #51) when discussing influences on self-concept.

Materials Needed: Transparency, overhead projector

2. Title: Bulletin Board

Description: Make the bulletin board "Monkey See, Monkey Do, A Child Will Imitate You" (Figure #52).

Materials Needed: Background, construction paper, letters

EVALUATION

Title: Writing Assignment

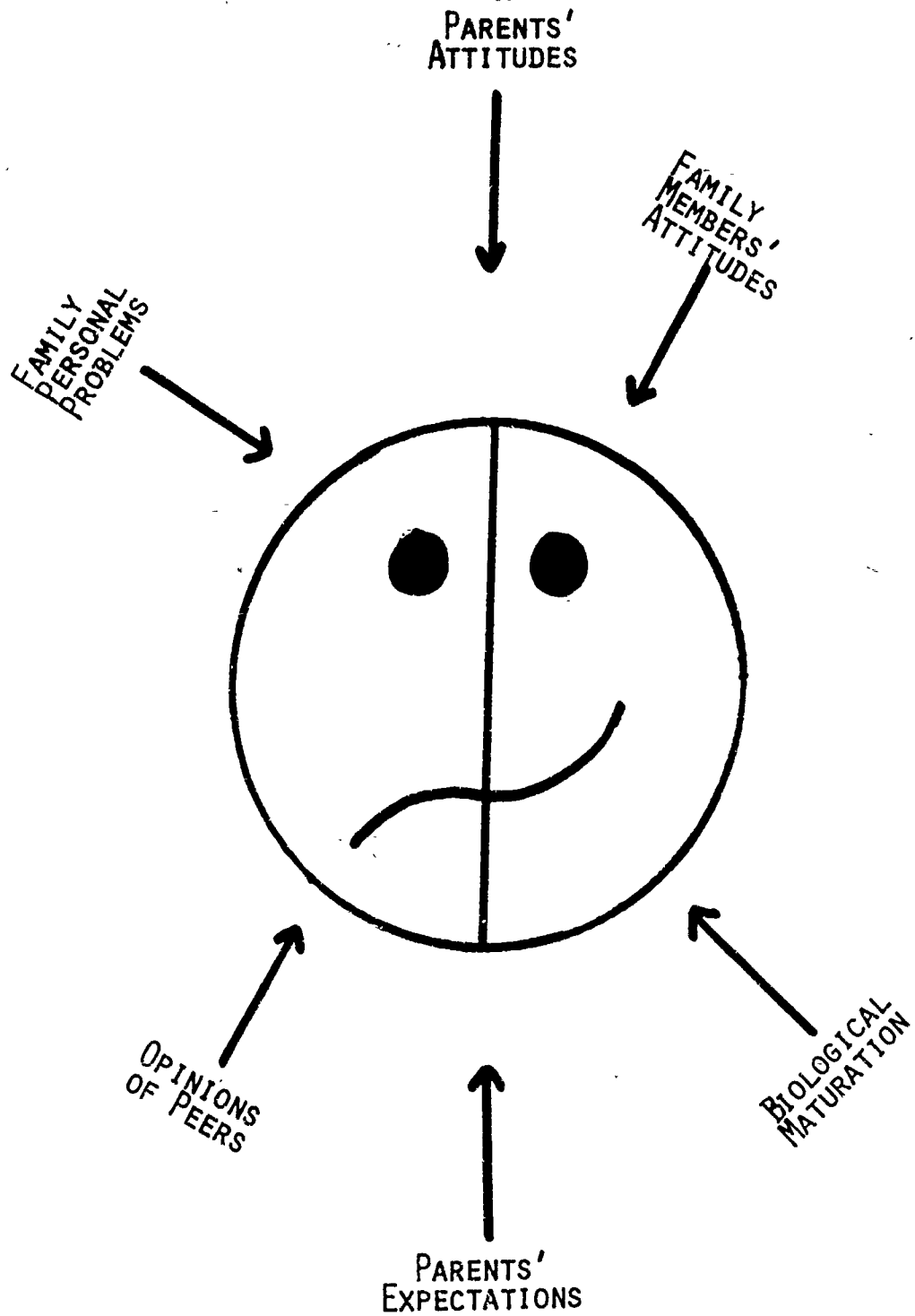
Description: Each student should respond in writing to the following question:

Discuss three ways in which parents influence the self-concept of the preschool child.

Parents build self-concept by: (1) Recognizing the child's feelings; (2) Accepting the child's feelings; and (3) Building the child's confidence through self-expression.

Materials Needed: Copies of the question for each student, or the question may be written on the chalkboard

Figure #51



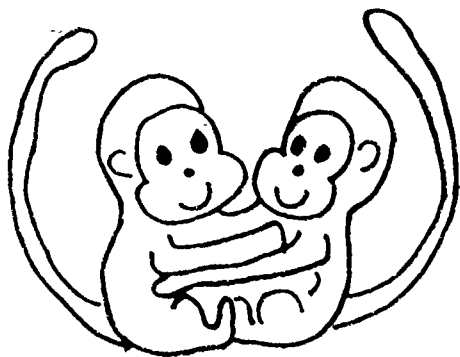
SELF-CONCEPT

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Figure #52

MONKEY SEE,

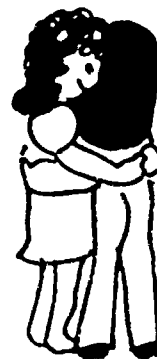
MONKEY DO...



A CHILD



WILL IMITATE



Self-Concept Word Search
Student Handout #21

See if you can find these words related to self-concept:

confidence, shyness, emotions, behavior, jealousy, grief,
affection, feelings, fear, guilt, joy, worry, security,
anger, thumbsucking, self-concept

U E B X N M I T W J K O E R
J C V I S Q T U I O P Z M H
Q N W E H P B E H A V I O R
Z E X C Y V B N M L K J T H
G D F D N S A P O I U Y I T
A I S J E A L O U S Y R O Q
O F U T S R E B J U E O N W
B N F U S E C O P I U Q S G
M O S E Q W E R A E F L K J
A C S D C G F E E L I N G S
Q W E R T T Y U I G U I L T
C V S A D F I P O I U J K L
C D E E R T Y O U K L H J G
A Z D V C H J K N M B V O C
Q W E Z R U O I W O R R Y P
Q W C E Z X R C V B N M L K
A S G D F G H I J K L P O I
M N B V C X Z A T G S D F G
A H J K L Q W E T Y R Y U I
W S T H U M B S U C K I N G
T P E C N O C * F L E S E Y
Q P W O I E U R T Y G H J F

When you have found each word, write a statement that uses a term and explain how that term relates to the self-concept of a preschool child.

UNIT: Growth and Development of the Preschool Child

CONCEPT: Social Development

GENERALIZATIONS

1. Many forms of social behavior in the young child are based on foundations formed as an infant.
2. Social behavior is affected by egocentric thinking.
3. Social behavior patterns developed in early childhood may be acceptable or unacceptable.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify at least six forms of social behavior in the young child and describe how children express each form.
2. Describe three ways adults can guide young children to develop acceptable social behavior.

OUTLINE

- I. Social Development
- II. Common Forms of Social Behavior

REVIEW OF SELECTED LITERATURE

The basis for social development in young children is formed during infancy. It is during this time that egocentrism or a self-centeredness undergoes socialization. The infant is primarily aware of his/her own existence. This egocentric thinking begins to lessen during the preschool years when children experience social contacts with persons outside the home, especially with children their own age. If preschool children have satisfying social experiences with other children and adults, they will want to repeat them. If their contacts are primarily frustrating, they may go out of their way to avoid meeting people (Hurlock, 1972).

Some forms of social behavior may appear unsocial or anti-social, but actually may be important in the socializing process. For example, negativism may be a child's response to a parent's aggressive discipline or intolerant attitude toward normal childish behavior. The response most commonly appears in connection with the established home routine, when the child refuses to perform a certain activity at a scheduled time. It also appears in a situation involving strangers. Children express their negativism by physical tenseness, by failing to carry out

requests, by pretending not to hear or understand, by stubbornness in connection with routine activities, and by many little acts of self-assertion, such as commanding, walking away, or hiding when called. As the child advances in age, physical expressions of resistance decline and verbalization increases. Children may lie to protect themselves or begin to use "no" as an answer to all sorts of suggestions, questions, and amiable approaches (Hurlock, 1972).

An actual or threatened act of hostility, known as aggression, may be regarded as normal during the early years. Aggressiveness is aroused when something happens to keep the child from reaching a goal that is important for personal satisfaction. Children express aggression in many ways, such as physical attack, temper tantrums, or verbal attack, as when a child antagonizes another with threats or lies. Sometimes the aggression is expressed indirectly, which may consist of an attack through another person or object, as when a child talks about another person or breaks an object belonging to another person. Aggression is likely to be strongest during periods of fatigue, just before eating and sleeping (Hurlock, 1972; Read, 1976; Westlake, 1973).

Quarreling generally begins when one child attacks another's person or property. Quarreling among children does not mean that they dislike each other. Most quarrels are among friends. Rarely do children show resentment or break off the friendship after a quarrel. Quarreling may involve destroying another child's work, taking away toys, screaming, crying, biting, kicking, hitting, or name calling. Quarreling is an educational experience for the child. It teaches what other people will and will not tolerate.

Young children are often teased and bullied by older ones. Teasing frequently involves calling someone a nickname that emphasizes physical or mental weaknesses. In bullying, a child will sometimes inflict physical pain on another child because of the pleasure derived from watching the victim's discomfort and attempts to retaliate (Hurlock, 1972).

Rivalry is common among children competing for adult attention. A preschooler is more anxious for adult than for peer attention and uses any means to get it. In the home, rivalry is common among siblings. Rivalry between a male and female sibling or between male siblings is likely to be stronger and lead to more quarreling than rivalry between female siblings (Hurlock, 1972).

A spirit of cooperation is evident in young children by the end of their third or fourth year. The more opportunities children have to be with other children, the sooner they develop the capacity to cooperate. Cooperative behavior is also developed more quickly when parents include young children in helping around the house (Hurlock, 1972).

Ascendant behavior, or the tendency to dominate others, is nearly universal in young children; it usually shows itself in their relationships with adults. Children who are especially assertive toward others derive this pattern of behavior from their home environments. They may come from homes where there are arguments over disciplinary policies, where there is too much restriction on the children's behavior, or many

coercive suggestions from parents. Ascendant behavior can be of great value to a child when properly directed.

As children play with others, they begin to learn the meaning of generosity, or the willingness to share with others. Children need a model of generosity to imitate, and they must be given approval when they imitate it successfully. They also learn to be generous by observing how other children react to their generosity.

Children like to be noticed and need social approval. Lack of social approval develops unhappy feelings and may drive a child to behave in an inappropriate way that ultimately gets attention.

Young children can display sympathy to some degree. They do this by helping, protecting or defending others; by comforting others with pats, hugs, and kisses; by reporting the situation to one adult or another; by asking questions to find the cause of distress; and by suggesting or offering solutions. Unsympathetic responses include laughing at the person in distress, attacking a child in distress, or merely staring (Hurlock, 1972).

Children depend upon others for help in doing things they cannot do for themselves. They also depend upon others for love and attention and for ego support in situations where their own adequacy is questioned. Dependency on others for attention and affection persists throughout the early years of childhood and often increases as the child grows older. In overdependency, children seek more help, attention, and affection than is normally necessary at their age level. This need generally stems from feelings of insecurity.

Most young children are friendly toward both adults and other children. They crave social contacts and are unhappy when deprived of them. Friendliness is expressed by hugging, kissing, and stroking; by giving rapt attention to what the other person says or does; by trying to protect the person against aggressive acts; by comforting the person; by wanting to be with the person constantly; and by helping in whatever way they can.

Children need encouragement to develop into social people. They should be rewarded for their efforts even when their behavior falls short of adult standards. Parents and teachers need to guide children in methods of coping with social situations that will win the approval they crave.

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- Read, K. H. The nursery school. Philadelphia: W. B. Saunders, 1972.

Smart, M. S., & Smart, R. C. Preschool children: Development and relationships. New York: Macmillan, 1978.

Westlake, H. G. Children: A study in individual behavior. Lexington, Mass.: Ginn and Company, 1973.

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An examination of the presocial behavior of young children in relation to social inferential ability and assertiveness.

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A textbook about the development of a child from the moment of his/her inception through the period of adolescence.

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A general text about the development of young children; written for people who teach and care for children.

LEARNING ACTIVITIES

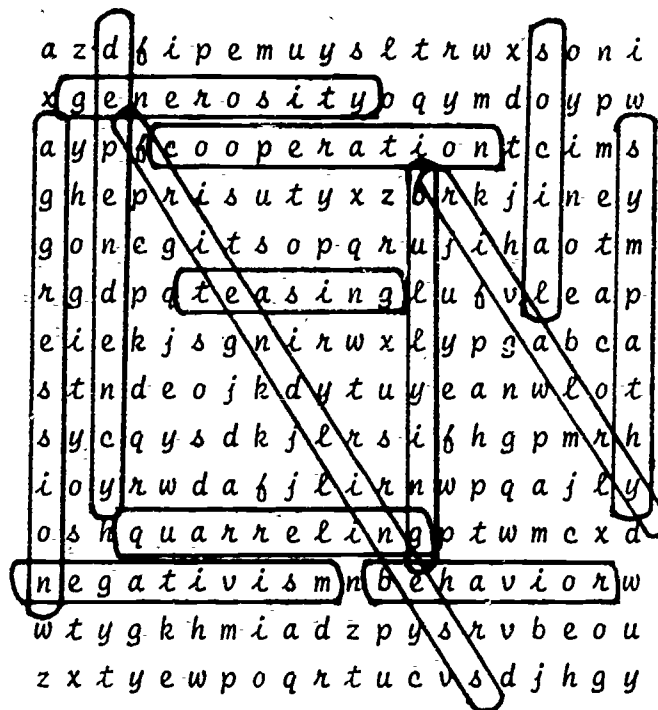
1. Title: Word Search Game

Description: Complete the "Social Development Word Search Game" (Student Handout #22).

Key:

1. Negativism	8. Friendliness
2. Aggression	9. Dependency
3. Quarreling	10. Generosity
4. Rivalry	11. Behavior
5. Teasing	12. Social
6. Bullying	13. Sympathy
7. Cooperation	

Key: Word Search



Materials Needed: Copies of word search grid and statements for completion

2. Title: Role Playing

Description: Write the following forms of social behavior on slips of paper: negativism, aggression, quarrels, teasing and bullying, rivalry, cooperation, ascendant behavior, generosity, social approval, sympathy, dependency, friendliness. Divide into groups and draw a form of social behavior from the slips placed in a bowl. Allow 5-10 minutes for preparation. Act out roles, and other class members will determine the form of social behavior demonstrated.

Materials Needed: Slips of paper with forms of social behavior written on them. Small bowl to hold slips for drawing.

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Make a transparency entitled "Social Behavior" (Figure #53), each segment represents a form of social behavior. On a plain sheet of paper, cut out a segment. Use as a cover sheet to reveal one behavior form at a time. Use a brad to attach cover sheet in center of circle.

Materials Needed: Transparency with overlay, overhead projector, brad

2. Title: Bulletin Board

Description: "Social Behavior Grows Best in Good Soil" (Figure #54) shows flowers with petals representing forms of social behavior.

Materials Needed: Construction paper, markers, background

EVALUATION

Title: Report

Description: The following true/false pretest can be used before discussing social development.

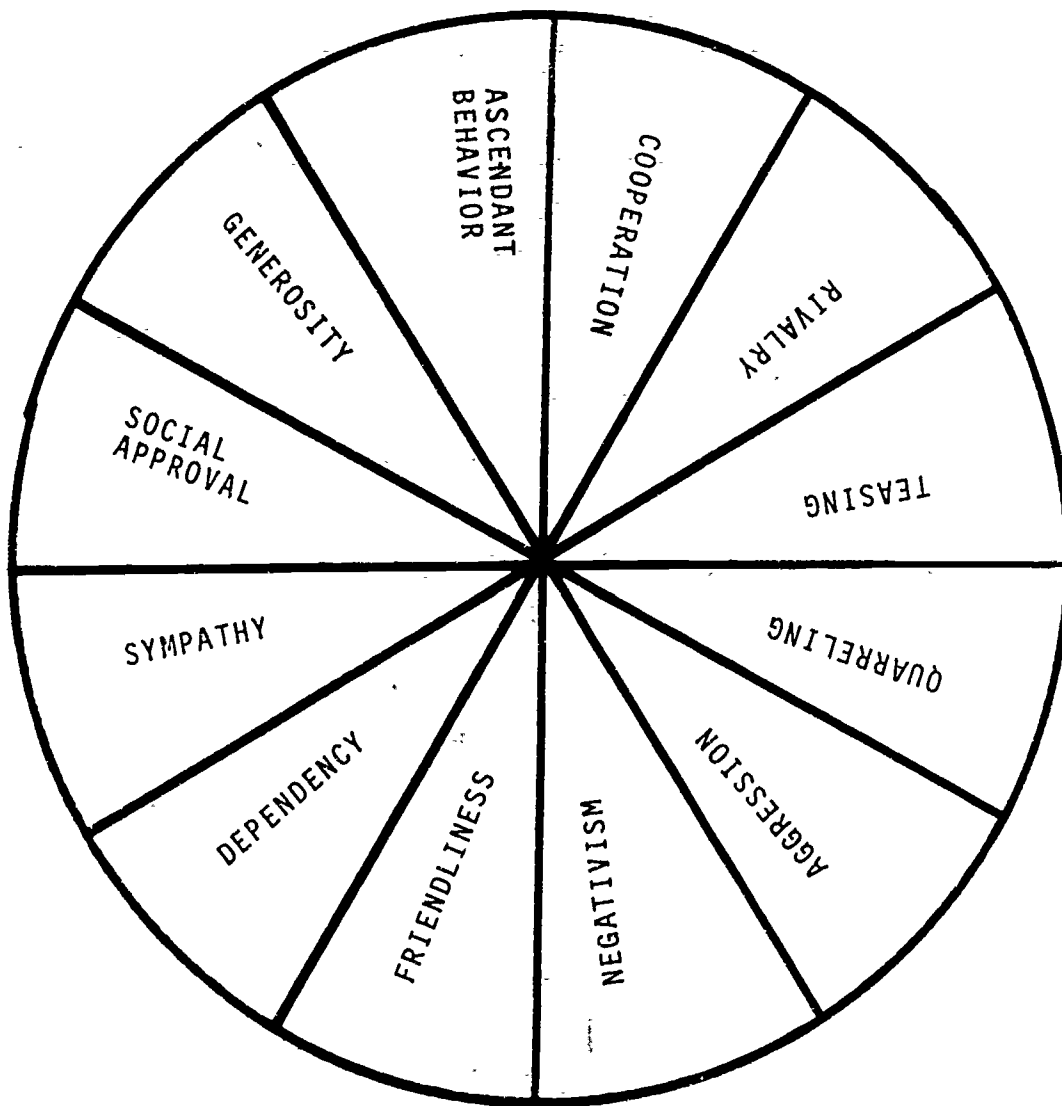
Write "true" in the blank if the statement is true, or "false" if it is false.

- True 1. Aggression, an actual or threatened act of hostility, may be regarded as normal during the early years.
- True 2. Most quarrels are among friends.
- False 3. Young children most often tease older children.
- True 4. Rivalry is common between children competing for adult attention.
- True 5. A spirit of cooperation is evident in young children by their third or fourth year.
- True 6. Lack of social approval develops unhappy feelings and may lead to behavior that invariably gets attention.
- False 7. Feelings of security lead a child to be overly dependent.
- True 8. Aggression is likely to be strongest during periods of fatigue.
- True 9. Cooperative behavior develops more quickly if parents include young children in helping around the house.
- False 10. Children express sympathy by staring and laughing at the distressed person.

Materials Needed: Copies of pretest

Figure #53

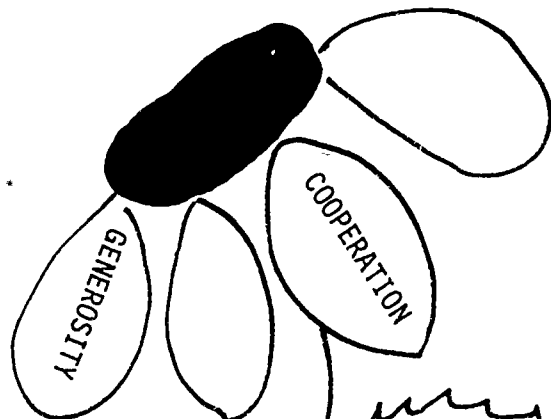
SOCIAL BEHAVIOR



SOCIAL BEHAVIOR GROWS BEST IN GOOD SOIL

Figure #54

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Social Development Word Search Game
Student Handout #22

The words needed to complete the following statements are found in the Word Search Guide. The words may be horizontal, vertical, or diagonal. Find the words and complete the statements.

1. _____ is a response to aggressive discipline, expressed by walking away, hiding and the use of "no" to answer suggestions, questions, and amiable approaches.
2. _____ is an actual or threatened act of hostility and is normal during the early years.
3. _____ is an educational experience. It does not indicate dislike and generally begins when one child attacks another's person or property.
4. _____ is common between children competing for adult or peer attention.
5. _____ often involves calling someone a nickname that emphasizes physical or mental weakness.
6. _____ a child will sometimes inflict physical pain to watch the victim's discomfort.
7. _____ is usually evident during the child's third or fourth year. It develops more quickly when parents allow young children to help around the house.
8. _____ is expressed by hugging, kissing, and giving attention to what another person says or does.
9. _____ on others for attention and affection persists throughout early years of childhood and often increases as the child grows older. Too much can indicate insecurity.
10. _____ is the willingness to share with others.
11. Ascendant _____ is the tendency to dominate others. It can be of great value if properly directed.
12. Because _____ approval is needed by children, parents and teachers should guide them in methods of coping with social situations so they will win the approval they crave.
13. _____ can be displayed by helping, protecting, or comforting others.

WORD SEARCH

A Z D F I P E M U Y S L T R W X S O N I
X G E N E R O S I T Y Q Y M D O Y P W
A Y P F C O O P E R A T I O N T C I M S
G H E P R I S U T Y X Z B R K J I N E Y
G O N E G I T S O P Q R U J I H A O T M
R G D P Q T E A S I N G L U F V L E A P
E I E K J S G N I R W X L Y P G A B C A
S T N D E O J K D Y T U Y E A N W L O T
S Y C Q Y S D K J L R S I F H G P M R H
I O Y R W D A F J L I R N W P Q A J L Y
O S H Q U A R R E L I N G P T W M C X D
N E G A T I V I S M N B E H A V I O R W
W T Y G K H M I A D Z P Y S R V B E O U
Z X T Y E W P O Q R T U C V S D J K G Y

UNIT: Growth and Development of the Preschool Child

CONCEPT: Selecting Toys for the Preschool Child

GENERALIZATIONS

1. Play materials should be simple, usable for many purposes, durable, and safe.
2. To meet the child's play needs, playthings must have qualities that contribute to the satisfaction the child derives from play.
3. Well-selected playthings should contribute to the child's physical and psychological development, while being appropriate for the learning style of the young child.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Describe at least three qualities of children's play materials.
2. Identify characteristics of desirable play equipment.
3. Describe play equipment to stimulate different aspects of children's development.
4. List criteria to consider when selecting toys for children.

OUTLINE

I. Toy Selection

II. Characteristics of Good Play Equipment

III. Equipment to Stimulate Development

A. Physical

1. Large muscle
2. Small muscle

B. Intellectual

1. Speech
2. Language

C. Social

REVIEW OF SELECTED LITERATURE

Equipment stimulates children's interest in play and enables children to have a variety of play experiences (Hurlock, 1978). According to Mayesky, Neuman, and Wladkowski (1975) play equipment should have the following characteristics:

1. Be as simple in design as possible.
2. Be versatile.
3. Stimulate children to do things for themselves.
4. Be large and easy to use.
5. Be durable.
6. Work properly.
7. Be available in proper amounts.
8. Encourage children to play together.

Some characteristics of good play equipment as listed by Hurlock (1978) include:

1. Offers chances for many play activities.
2. Suited to the child's age and level of development.
3. Can be used without adult help.
4. Safe, no matter how the child uses it.
5. Can be used for play with other children.
6. Can be used indoors or outdoors.
7. Appeals to the child's interest in colors.
8. Stimulates the child's interest and creativity.
9. Belongs to the child.
10. Small and light enough so that the child can move it without adult help.

Some activities listed by Mayesky, Neuman, and Wladkowski (1975) that help children develop large muscle skills are:

1. Lifting hollow blocks, cartons, or other large materials, such as boards or bags of objects.
2. Piling large blocks or cartons in stacks.
3. Climbing trees.
4. Swinging on a swing.
5. Riding a tricycle.
6. Digging with a shovel, raking leaves, sweeping with a broom, and sponging with a mop.
7. Pounding nails and sawing wood.
8. Balancing on a low board.
9. Bouncing on a trampoline.
10. Throwing large rubber balls.
11. Working with finger paints.

Some activities that develop small muscle skills are:

1. Dressing and undressing themselves, buttoning coats, lacing and tying shoes, pulling on boots, and hanging coats on hook.

2. Dressing and undressing dolls.
3. Eating with forks and spoons and pouring juice from a pitcher into a glass.
4. Putting jigsaw puzzles together.
5. Playing with small toys and blocks.
6. Cutting out figures and painting with a small paintbrush, crayon, or felt-tipped pen.
7. Working with small tools.
8. Using finger puppets and other finger play.

Hurlock (1978) suggested the following equipment to stimulate speech and language development: records, picture books, story books, puzzles, games, and "how-to" toys. Equipment for social development includes anything that can be shared or used in play with other children, such as sleds, sandboxes, wading pools, make-believe play equipment, balls, swings, seesaws, jungle gyms, and jump ropes.

REFERENCES

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- Mayesky, M., Neuman, D., & Wladkowski, R. J. Creative activities for young children. Albany, N. Y.: Delmar Publishers, 1975.

SUGGESTED READINGS

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- An excellent background text on child development. Includes information on toy selection for young children.
- Conger, F. S., & Rose, J. B. Child care aide skills. Dallas: McGraw-Hill, 1979.
- An excellent book on child care. Good examples, a chapter summary, new terms to learn, and student activities are included in each chapter.
- Mayesky, M., Neuman, D., & Wladkowski, R. J. Creative activities for young children. Albany, N. Y.: Delmar Publishers, 1975.
- A well-written, interesting book on activities for young children.

LEARNING ACTIVITIES

1. Title: Buzz Session

Description: Divide into groups. Give each group a box of a different size. Allow five minutes for the groups to list all the ways a child could use the box in creative play. After five minutes let each group describe how its box could be used. Let other class members add other ideas they might have. Compile a list of household items children could use as toys.

Materials Needed: Boxes of different sizes for each group

2. Title: Toy Evaluation

Description: Make a list of ten toys or items you played with as a child. Briefly describe each item in terms of cost, size, appearance, and versatility. Number them from one to ten with one being the one you remember as your favorite. Evaluate the favorite toy using the following criteria.

Which skills does it help to develop?

A. Physical

1. Large muscle
2. Small muscle

B. Intellectual

1. Speech
2. Language

C. Social

Materials Needed: Copies of above evaluation criteria

3. Title: Field Trip

Description: Visit a toy store to compare prices and quality of toys for children. Select the toy which best promotes the child's development through play and the toy which is least useful as a developmental tool.

Materials Needed: Arrangements with toy store, permission from principal, permission slips, transportation arrangements, thank you letter.

4. Title: Toy Display and Evaluation

Description: Arrange several toys on display. Make a copy of the following checklist on a large piece of poster paper for a background. Use the checklist to evaluate toys on display. Discuss answers in class.

TOY EVALUATION CHECKLIST

Is the toy:	Yes	No	Undecided	Comments
1. Simple				
2. Durable				
3. Safe				
4. Unbreakable				
5. Educational				
6. Versatile				
7. Stimulating				
8. Self-correcting				

Materials Needed: Poster paper, marker, toys

INSTRUCTIONAL AID

Title: Bulletin Board

Description: "It's a Jungle Out There" (Figure #55) includes drawings or a collage of toys, desirable and undesirable, in a solid mass, and could be used when discussing buying toys.

Materials Needed: Background, letters, magazine pictures, construction paper, markers

EVALUATION

Title: Crossword Puzzle Evaluation

Description: Complete the crossword puzzle "Selecting Preschool Toys" (Student Handout #23).

Key: Across

- 3. belongs
- 4. tools
- 6. nontoxic
- 8. safe
- 9. free
- 11. sleds
- 12. mop
- 14. educational
- 16. interesting
- 17. smooth
- 19. durable
- 21. versatile
- 22. eating

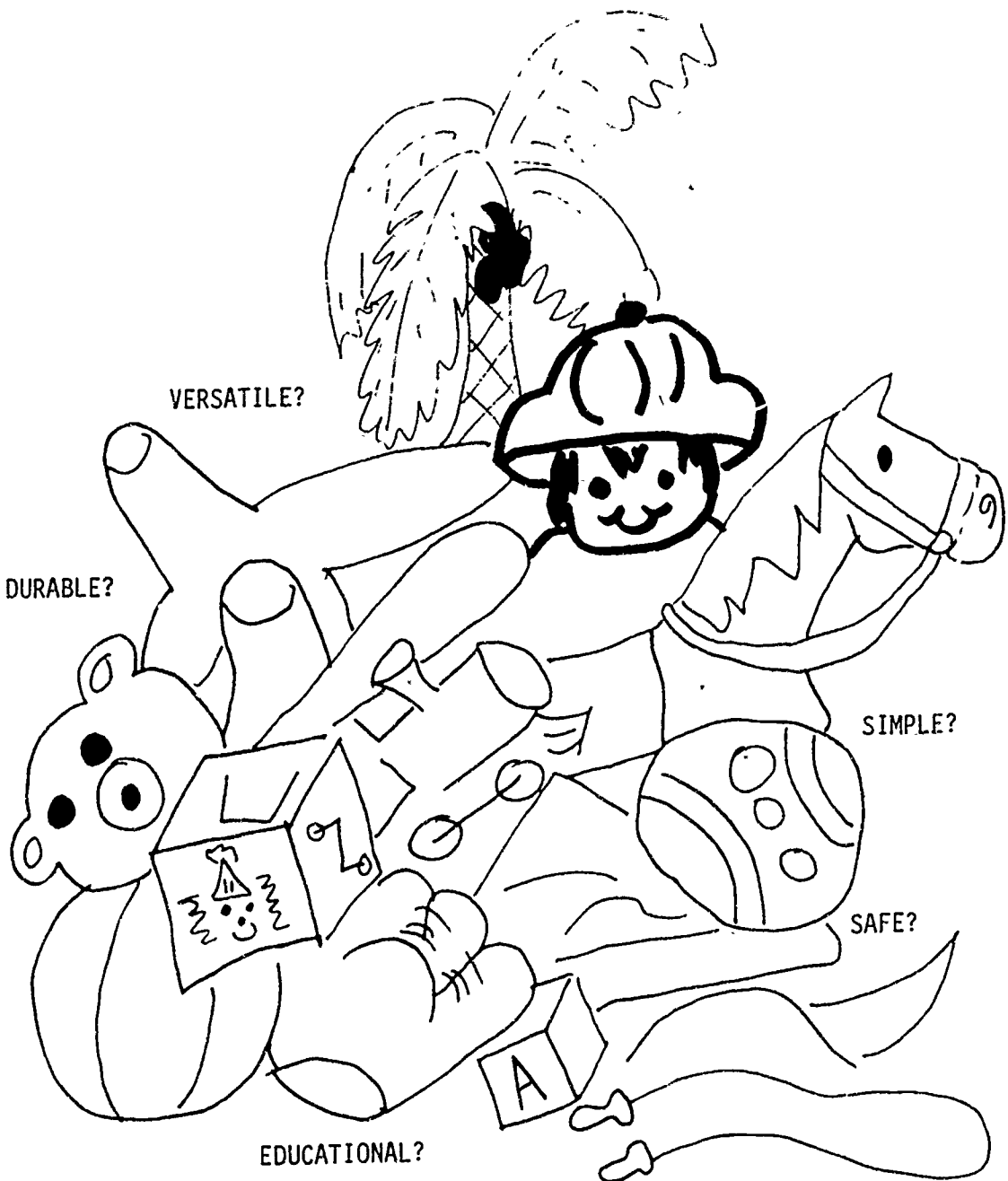
Down

- 1. intellectual
- 2. colorful
- 5. social
- 7. cords
- 8. simple
- 10. unbreakable
- 13. pointed
- 15. creative
- 18. muscle
- 20. age

Materials Needed: Copies of puzzle and phrases

Figure #55

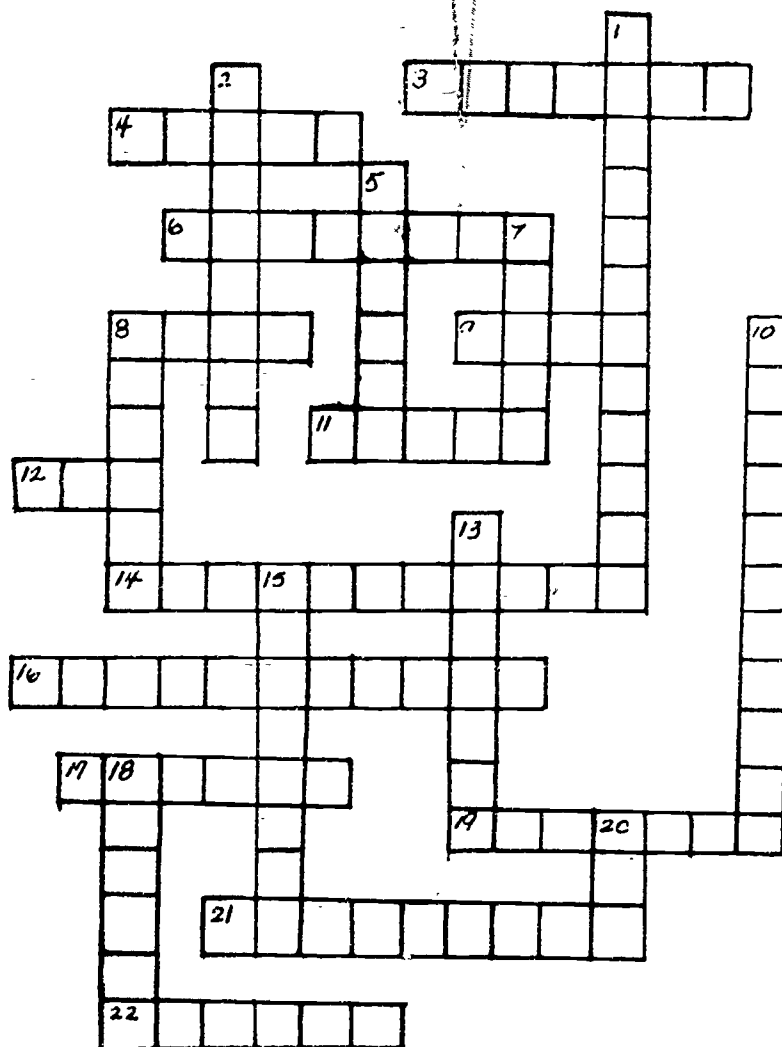
IT'S A JUNGLE OUT THERE



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Selecting Preschool Toys - Crossword Puzzle
 Student Handout #23



Across

3. A child should have a toy that _____ to that child alone.
4. Working with small _____ can develop small muscle skills.
6. All paint on toys should be _____.
8. Toys should be _____ no matter how the child uses it.
9. Toys should be _____ from small parts that can be removed and swallowed.
11. _____ are shared with others and encourage social development.
12. Using a sponge _____ can help develop large muscle skills.

Selecting Preschool Toys - Crossword Puzzle
Student Handout #23-Continued

Across

14. Good toys are _____ when they aid in the child's learning process.
16. Unless the toy is _____ the child will not enjoy playing with it.
17. A _____ surface, with no sharp edges, promotes safety.
19. _____ toys are needed to hold up to preschoolers' play.
21. If a toy is _____ it can be used for more than one method of play.
22. _____ with forks and spoons is an activity that will develop small muscle skills.

Down

1. _____ development and language development can be stimulated with well-selected toys.
2. _____ toys will gain a child's interest more quickly.
5. _____ development comes with sharing toys with other children.
7. _____ on crib toys should be no more than 12 inches long.
8. A _____ toy may allow a child to be more creative than a complicated one.
10. Toys should be made from _____ material.
13. _____ toys can be dangerous if fallen upon or if they come in close contact with the eyes.
15. A good toy stimulates the imagination and causes the child to be _____.
18. Large _____ skills include lifting hollow blocks, climbing, digging with a shovel, and throwing large rubber balls.
20. Be sure the toy is suited to the child's _____.

UNIT: Growth and Development of the Preschool Child

CONCEPT: Play

GENERALIZATIONS

1. Play is a child's way of learning.
2. Children's play changes very little from one generation to another.
3. Children's play follows a predictable pattern.
4. A young child's play should be balanced between active and passive activities.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List reasons why play is important to the development of a young child.
2. Describe common characteristics of children's play.
3. Define active and passive play and give examples of each.
4. Name and describe the forms of social play.

OUTLINE

I. Value of Play

II. Characteristics of Children's Play

- A. Influences
- B. Social Play
- C. Activities
- D. Playmates
- E. Sex Stereotyping
- F. Formal and Informal

III. Categories of Play

- A. Dramatic
- B. Constructive

C. Active

D. Passive

REVIEW OF SELECTED LITERATURE

Play stimulates intellectual development. A child learns sizes, shapes, colors, and textures of objects through play activities. A child distinguishes between reality and fantasy during the play process. Play offers a child the opportunity to experiment and try out new ideas. Play enables a child to establish a more definite and realistic self-concept. By playing with others, children learn to establish social relationships and learn acceptable social behavior. A child also learns to fulfill the appropriate sex role patterns through association with playmates.

The therapeutic values of play are observed as children replay an unsatisfactory scene, play a role that is powerful or dominant, or counteract negative feelings through play. The discharge of tension aids the child in becoming better adjusted emotionally. In play there are many opportunities to symbolize by making objects stand for other objects, by pretending there are objects when there are none, and by gradually increasing the use of words and abstract symbols to stand for ideas or concepts (Robinson, 1977).

Play is influenced by tradition. The play of children in one culture changes very little from one generation to another. Social play follows a predictable pattern of development: unoccupied behavior, solitary play, onlooker behavior, parallel play, associative play, and cooperative or unorganized supplementary play. Unoccupied behavior characterizes a child who observes others at play for brief periods of time. In contrast, onlooker behavior describes a child who observes and talks to children at play, but does not enter into their activities. During solitary play a child plays alone and ignores others. In parallel play, common among three year olds, a child plays near others, but not with them. Associative play is an initial attempt at group play. Children use similar play materials, but do not organize their play, and roles are not assigned (Gilley & Gilley, 1980).

Play activities change with age. As the child's attention span increases, he/she can concentrate on one play activity longer instead of moving from one to another. Older children have less time available for play and want to spend their time in ways that give them the greatest satisfaction.

As the child gets older, his/her play becomes increasingly sex stereotyped. Young children make little distinction between boys' toys and girls' toys. By the time they enter school, however, boys are clearly aware of what is considered girls' toys and activities and stay away from them and vice versa.

Play may be either active or passive. In active play the individual is doing the action, such as running or constructing something. Both

dramatic play and constructive play are forms of active play. In dramatic play or make-believe play, the child imitates the roles of characters which are observed. In constructive play the child makes mud pies, builds mountains or sand castles, plays with blocks, beads, scissors, clay, paint, crayons, or paste. In passive play, the child watches the activities of others and expends a minimum of energy. Activities such as watching television, looking at comics and pictures, reading books, or listening to music are all forms of passive play.

Play is a natural activity of childhood. Anything can be a toy, and in his/her imagination, a child can be an adult, a hero, a princess, a bad guy, or a puppy. Play is children's work.

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- An excellent text for teachers and students on all aspects of child care. Good information on play.
- Baker, K. R., & Fane, X. F. Understanding and guiding young children. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.
- An easy reading text for students and teachers on the growth and development of children. Interesting section on play of preschool children.
- Read, K. H. The nursery school. Philadelphia: W. B. Saunders, 1976.
- A general textbook to help students gain knowledge in understanding and guiding young children in a nursery school environment.

LEARNING ACTIVITIES

1. Title: Learning Experiences

Description: Plan activities that would help a preschool child learn about the following:

1. Shapes

2. Colors
3. Textures
4. Sizes
5. Properties of water

Identify the following for each activity: objective of the activity for the child; the materials needed to present the activity; procedures to follow in presenting the activity.

Invite a small group of preschoolers to class. Present a selected group of the planned activities. Evaluate the effectiveness of the experience for the children.

Materials Needed: Assorted reference books and resource materials with information about children's play and learning experiences

2. Title: Interviews

Description: Interview parents and grandparents about their play activities when they were children. Discuss.

Materials Needed: Tape recorder

3. VOCABULARY

1. Active Play--The child is doing the action; expends energy.
2. Passive Play--The child watches the activities of others; expends very little energy.

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Use "A Child's Stairway to Development" (Figure #56) bulletin board when discussing how play helps a child develop.

Materials Needed: Markers, construction paper, background

2. Title: Transparency

Description: A transparency entitled "Play" (Figure #57) lists types of active and passive play and can be used when discussing this topic.

Materials Needed: Transparency materials, overhead projector

EVALUATION

1. Title: Assignment

Description: React in writing to one of these statements:

1. All work and no play makes Jack a dull boy.
2. Play is a child's work.

Materials Needed: Paper, pen

2. Title: Written Evaluation

Description: The following test consists of questions concerning active and passive play.

In the blank beside the types of play listed below write "A" for active play and "P" for passive play.

1. P Watching television 6. A Dramatic
 2. P Listening to music 7. P Looking at pictures
 3. A Neighborhood games 8. P Listening to stories
 4. P Watching others 9. A Mother games
 5. A Exploring 10. P Looking at comics
2. Describe two play situations that would encourage active play.
 3. Write a paragraph on what the following statement means to you:

For play to be most beneficial, there should be a balance between passive play and active play.

Materials Needed: Copies of test

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PLAY

A CHILD'S STAIRWAY
TO

DEVELOPMENT

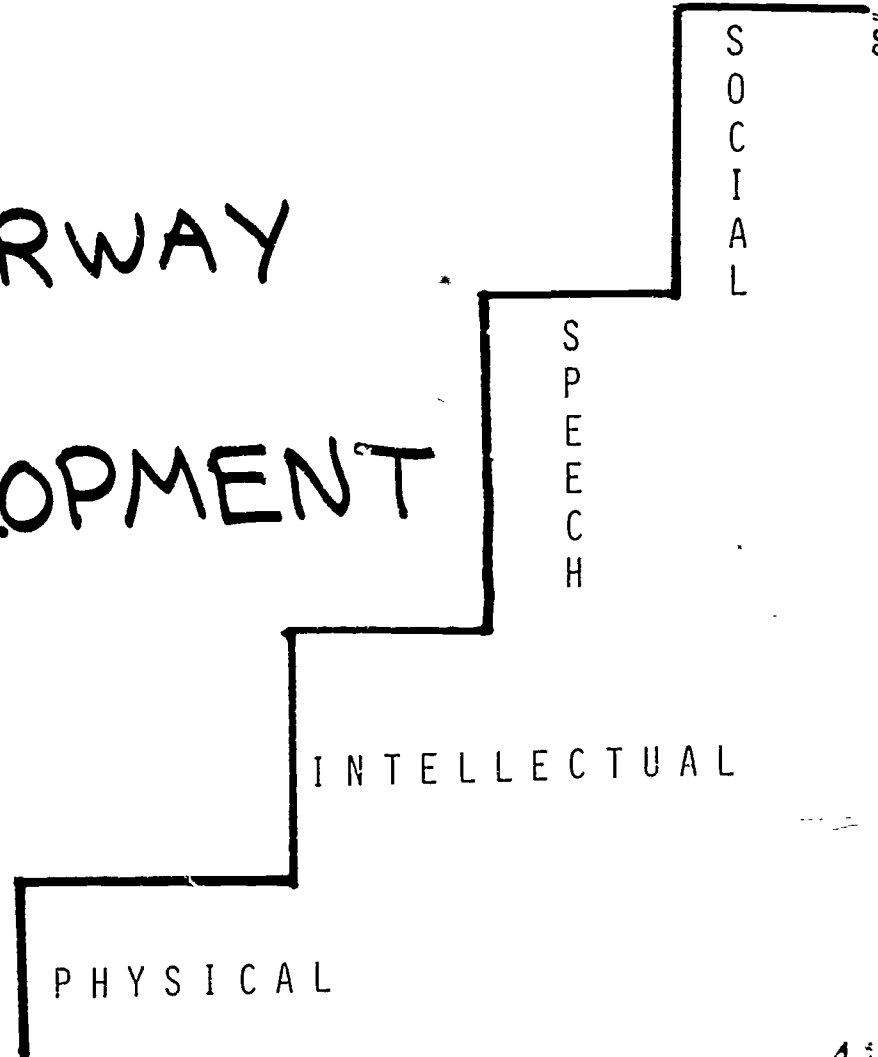
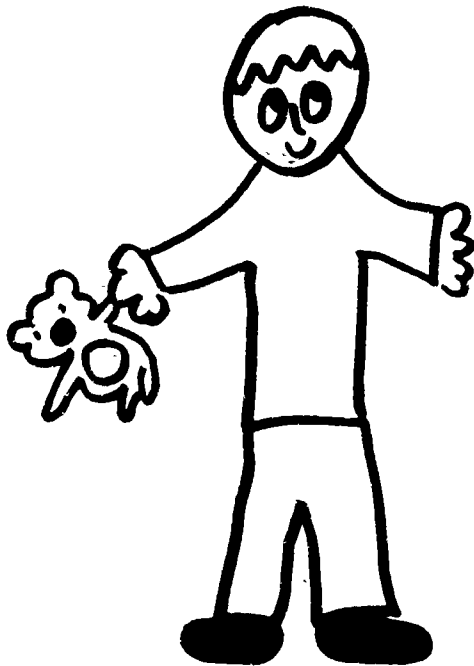


Figure #56

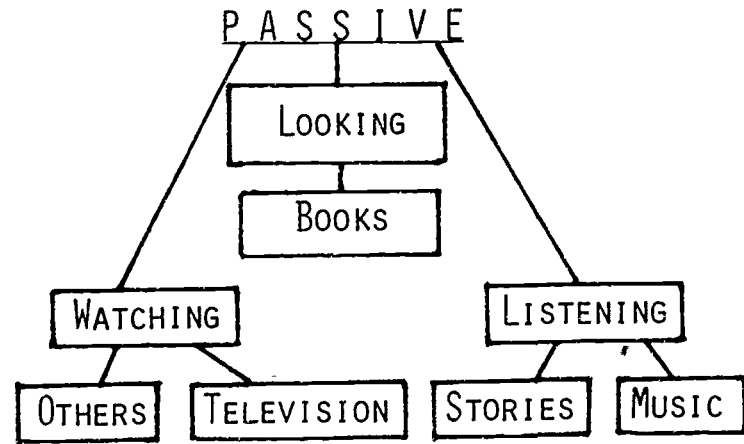
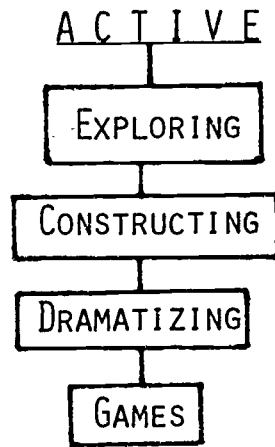
359

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410

P L A Y

Figure #57



360

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UNIT: Growth and Development of the Preschool Child

CONCEPT: Creative Materials for Young Children

GENERALIZATIONS

1. Play experiences with actual objects stimulate concept development.
2. Creative and manipulative experiences for young children should be personal and individual.
3. By using their hands to put their thoughts into a visible form, children develop manipulative skills, enhance motor coordination, and improve concept formation.
4. Simple homemade musical instruments for children can provide opportunities for self-expression and music appreciation.
5. Cooking, carpentry, and gardening are excellent activities for developing science concepts.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify some specific activities for children that promote concept formation.
2. List specific examples of activities that will develop manipulative skills.
3. Cite appropriate activities that help children develop motor skills.
4. Describe five simple instruments that can be easily made for children's use.
5. Discuss the importance of art in a child's play activities.
6. List two types of science experiences.

OUTLINE

- I. Play Materials
 - A. Concept Development
 - B. Manipulative Skills
 - C. Motor Skills

II. Musical and Science Experiences

A. Musical Instruments

B. Science Experiences

1. Cooking
2. Carpentry
3. Gardening

REVIEW OF SELECTED LITERATURE

Play materials for young children can be simple, usable for many purposes, durable, safe, and also inexpensive. Basic concepts, such as colors, shapes, sizes, and textures, may be developed through play materials (Ames, 1979).

Play materials which enhance manipulative skills include wooden puzzles, wooden beads, pegboards with sticks, and a doll house with furnishings and small dolls. Board and card games, geometric form boards, table-sized blocks, and sorting collections, such as buttons, seeds, and painted bottle caps, are also included (Gilley & Gilley, 1980). Art media, such as play dough, modeling sawdust, modeling clay, and papier mache' are easily prepared and are also helpful in developing manipulative skills (Baker & Fane, 1975).

Motor skills may be developed by cutting paper and cloth, pasting, taping, sticking, plastering, and painting. Rates of motor development will not be the same for every child. Tasks in motor development are achieved in a sequence, or order, which can be easily observed (Draper & Draper, 1979).

Music is a universal language for young children because it is an ideal means to communicate feeling. Rhythm instruments, such as dowel sticks, bells, or shakers, can be used creatively by children (Gilley & Gilley, 1980). Many sound-making instruments can be made, such as drums, from cans, wooden bowls, or nail kegs; cymbals from two lids of pans; bells on sticks or elastic wrist bands; rattles from small boxes with rice or dried peas inside; or tambourines from bottle caps on embroidery hoops. For reasons of hygiene, it is better to avoid an instrument that goes into the mouth (Baker & Fane, 1975).

Science is important to children in three ways:

1. Nonverbal children are given a chance to show their skill without having to express their thoughts verbally.
2. Science activities are designed to help children develop skills.
3. Science develops creative skills of children (Mayesky, Neuman, & Wladkowski, 1975).

Foods can be used in activities that help children become more creative. Cooking activities help children learn new information. They develop knowledge about (1) names of shapes and colors, (2) tastes, (3) changes in shape, size, color, and tastes, (4) new words, and (5) a logical view of the world. Food activities also help children develop skills in hand-eye small muscle coordination, simple measuring, and socialization. Food activities also help children develop good attitudes about themselves and learn how to deal with problems while having fun.

In order to help children become more creative, food activities must meet certain standards. Activities must be open-ended, without the rigid schedule of a cookbook; be challenging, but not too difficult; and be varied, giving children choices. They should emphasize the doing, not the end-product; involve inexpensive materials; and not be dangerous to children (Mayesky et al., 1975).

Imaginative children use many building materials for construction. Cardboard cartons; wooden boxes; sturdy chairs turned on their sides; a card table with a blanket or sheet over it--all these things serve building purposes. Preschool children usually enjoy a lightweight hammer, nails with large heads, and pieces of soft wood. Carpentry gives them a chance to gain motor skill and a sense of real accomplishment by making an airplane, for example, or by nailing two boards together. When children use tools, they need responsible supervision (Baker & Fane, 1975).

Experiences with plant life are important for a child. Seed planting, followed by watering, feeding, and cultivation of the growing plants mystifies children and reveals some of the secrets surrounding plant life and growth processes. Transplanting is fun and offers both sensory experiences and concept formation by feeling the dirt, handling delicate plants, and observing the plant's growth (Draper & Draper, 1979).

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- Baker, K. R., & Fane, X. F. Understanding and guiding young children. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.
- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.
- Gilley, J., & Gilley, R. Early childhood development and education. Albany, New York: Delmar, 1980.
- Mayesky, M., Neuman, D., & Wladkowski, R. J. Creative activities for young children. Albany, New York: Delmar, 1975.

SUGGESTED READINGS

- Draper, M. W., & Draper, H. E. Caring for children. Peoria, Illinois: Charles A. Bennett, 1979.

A well-written text on child care and development. The book has a special appendix entitled "Schedules and Routines for Children's Activities."

Gilley, J., & Gilley, R. Early childhood development and education. Albany, New York: Delmar, 1980.

An excellent text which includes information on play materials as well as good background information on child development and education.

Mayesky, M., Neuman, D., & Wladowski, R. J. Creative activities for young children. Albany, New York: Delmar, 1975.

An interesting text on several aspects of play and play materials.

LEARNING ACTIVITIES

1. Title: Making toys that encourage manipulative skills

Description: Make one of the following toys:

1. sorting game
2. small doll
3. card game

The teacher will display examples of these toys.

Materials Needed: (1) boxes, egg cartons, buttons, seeds, bottle caps, markers (2) material scraps, stuffing, buttons, lace, ribbon, yarn (3) poster board, contact paper, markers

2. Title: Evaluating toys that encourage manipulative skills

Description: The teacher will assign a toy that was constructed by a classmate for each student. evaluation checklist and make comments for suggestions and improvements.

Materials Needed: Previously constructed toys, evaluative checklist developed by students

3. Title: Construction of Active Play Material

Description: Divide into small groups at various work stations. After a group completes the making and discussion of one medium, they will rotate into the next station. Each student should have a copy of "Recipes for Play Materials" (Student Handout #24). Each group will participate in making all of the following art materials: Soap bubbles, Play Dough, Soap Paint, Finger Paint.

Materials Needed: Recipes

INSTRUCTIONAL AIDS

1. Title: References

Description: Contact elementary school teachers, the local extension office, or teachers at a day care center for ideas on making creative materials for children. The books and booklets listed below are excellent resources.

Sources: Ideas To Go--Teacher Made Learning Aids--Louisiana Association Children Under Six.

Lorton, M. B., Workjobs. Menlo Park, Ca.: Addison--Wesley, 1972.

Clatt, M. G. P., & Shaw, J. M. Junk treasurers. Englewood Cliffs, N.J.: Prentice-Hall, 1981.

Warner, D., & Quill, J. Beautiful junk. U.S. Department of Health, Education and Welfare, Washington, D.C.: Publication No. 73-1036.

2. Title: Sources of Free and Inexpensive Materials

Description: When requesting materials, remember these tips:

1. Write on regular-sized school letterhead.
2. Hand write, never type a letter of this type. Hand written letters get more results.
3. Keep letters short, neat, and to the point.
4. State who you are and what position you hold.
5. State what materials you desire and thank them in advance for their help.
6. If specific materials are not desired, state a desire for any teaching materials the agency has available.
7. State how you intend to use these materials with your group.
8. When materials are received, promptly write a thank you note. This thank you note will put you on their mailing list.

Sources: Local

1. Hospitals--may provide free sterile masks, tongue depressors and older stethoscopes.
2. South Central Bell--has a Tele Trainer System you can request to use in your classroom. Contact your local phone office.
3. Local Dairy Distributors--call or write Borden's, Midwest, etc. for any materials available.
4. Baskin and Robbins--ice cream buckets.
5. Local Insurance Companies.

Sources: National

1. Colgate Professional Services, Chicago, Ill. Ask for: "How to be a Good Lord--lord to your Teeth." State number of children in

- your class. You will receive free--a film strip, record, plaque detection tablets and instructions for their use.
2. National Fire Protection Association, 60 Battery March Street, Boston, Mass. 02110. Ask for: (a) "Sparky's Coloring Book," (b) "Sparky Makes a Home Fire Inspection," (c) "So the Clothing You Wear Burns?," (d) "Babysitters Handbooklet for Emergency Action." State number in your class. You will receive a free copy of each item above for every child.
 3. American Institute of Baking, 400 E. Ontario Street, Chicago, Ill. 60611. Ask for: "Food Ways to Follow."
 4. Del Monte Teaching Aids, P.O. Box 3575, San Francisco, CA, 94119. Ask for: "The Big Tour Daily Countdown Poster" and other teaching aids.
 5. Cereal Institute, 135 South La Salle Street, Chicago, Ill. 60603. Ask for: "Alexander's Breakfast Secret." You will receive a free record and filmstrip.
 6. National Livestock and Meat Board, 36 South Wabash Ave., Chicago, Ill. 60603. Ask for: "Food Power Tower."
 7. U. S. Forestry Service, U. S. Department of Agriculture, Washington, D. C. 20000. Ask for: "Smokey the Bear Kit."
 8. U. S. Forestry Services, U. S. Department of Agriculture, Washington, D. C. 20000. Ask for: "Johnny Horizon Ecology Kit."
 9. State of Florida, Department of Citrus, Box 148, Lakeford, Fl. Ask for: Six colorful citrus pictures and for citrus fruit posters available.
 10. American Railroad Association, Box 1808, Washington D. C. 20000. Ask for: Free teaching materials. Inexpensive materials: (1) Superintendent of Documents, Department of HEW, Washington, D. C. 20000. Ask for: 3 Colorful teaching posters. Cost \$0.35.

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Recipes for Play Materials
Student Handout #24

Play Dough

3 cups flour 1/6 cup Wesson Oil
1 cup salt 2/3 cup water

Mix flour and salt together, then add oil and water gradually. Knead until the mixture is smooth and easy to handle. Choose the vegetable coloring desired and knead it in. Wrap in air tight container when not in use. Refrigerate.

Bubbles

1/4 cup glycerine Mix together in jar. Use bubble pipe, pipe cleaner, or straw to blow bubbles. This mixture makes big bubbles.
1/2 cup water
1 T. liquid detergent

Soap Paint

1 to 2 cups soap flakes Mix soap flakes and a small amount of water in a large bowl. Whip with rotary beater until the mixture reaches the consistency of cake frosting. Divide into smaller bowls and add various colors. Apply mixture with paint brush to heavier paper (construction) or shiny paper, or use hands as in finger painting.
water
coloring

Finger Paint

Mix together 1 12-oz. box of Faultless Starch with an equal amount of Ivory soap flakes. Slowly add water while stirring. You will add approximately 2 cups of cold water. Mix and beat this mixture until it reaches the consistency of whipped potatoes. Add powder paint to color. Dark colors are more effective.

UNIT: Growth and Development of the Preschool Child

CONCEPT: Influence of Television

GENERALIZATIONS

1. Too much television viewing can affect a child's values, beliefs, schoolwork, physical development, and family interaction.
2. Parents can control the influence of television within their homes.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain at least five ways excessive television viewing affects a child.
2. List at least four ways parents can control the influence of television within their home.

OUTLINE

- I. Effects of Television on the Child
- II. Parental Guidance of Television Viewing

REVIEW OF SELECTED LITERATURE

"In order to understand the impact of television on children, it isn't necessary to study all the latest reports on behavioral research. As an alternative, you can simply watch a child watching television. What you will usually observe is an immobile, uncommunicative subject, oblivious to his surroundings, with a face devoid of expression and eyes that stare vacantly into space---in short, a child exhibiting the classic posture of an addict" (Kittrell, 1978, p. 20).

Kittrell (1978) stated that he is not comparing Captain Kangaroo with the neighborhood pusher, but says that there are remarkable similarities in the experiences of drug-taking and television watching. Both actions serve to remove the child from his/her environment, and both can be used as a means of escape. Drug-taking and television watching are basically passive states which require little thought or preparation, and the desired effect is achieved without any expenditure of energy or commitment. Television can act as both a sedative and a stimulant, depending upon the child and the program being watched. Some programs relax young children before meals or bedtime, and certain programs can send a child dashing through the house, as he/she imitates aggressive behavior of a video hero.

Without question, when a child spends one-sixth or more of waking time in one activity, it will have an influence on actions and attitudes and will contribute to the shaping of personal and moral values. Whether this influence is immediate or long-term will depend upon how the child reacts to the programs and how they influence attitudes and values (Hurlock, 1972).

There are many reported effects of television; however, until further information is available, it is impossible to conclude how helpful or how damaging television is and whether the effects are temporary or permanent. There is strong evidence that the well-adjusted child is less likely to be adversely affected than the poorly adjusted child, and the healthy child less than the unhealthy (Hurlock, 1972).

The arguments against television claim that it interferes with a regular schedule of eating and sleeping. Many children may delay a meal to watch a program or eat while watching it. Children may stay up beyond their usual bedtimes to watch T.V. and therefore get too little sleep. Television watching cuts into the time available for outdoor activities and play with other children, thus depriving the child of healthful exercise, emotional release, and social interaction. Television also interferes with the child's schoolwork and studying. Within the home, television watching draws the family members together physically, but it often restricts positive social interaction among them.

A constant diet of violence may blunt the child's sensitivities and encourage the development of values that are not socially acceptable. Children are likely to accept the violent behavior they watch on television as a normal pattern of life. They take what they see as realism, not fantasy, and often misinterpret what they see. Studies reveal that under certain conditions, and depending upon the types of violence portrayed, exposure to violence can produce in children an increased inclination toward aggression (Hurlock, 1972; Kittrell, 1978; Read, 1976).

Television advertising also has an influence on children. A national survey reported that parents consider demands by their children for products advertised on television as one of the major problems in rearing children. Many children have little understanding of what T.V. commercials are or what they do, and they have difficulty distinguishing between fantasy and reality and between advertising and informational programming. A lot of advertisers are aware of the problem and take advantage of children (Kittrell, 1978; National Science Foundation, 1977).

Parents can effectively control television's influence on children within their homes. O'Bryant and Corder-Bolz (1978) give some suggestions to parents. Questions that are often asked by parents are, "How much T.V. should I let my children watch?" or "What content should my children watch?" or "Is it all right for my children to have a T.V. set in their own room?" The response to these questions compared television to good nutrition by asking if conscientious parents would place a refrigerator in the child's room and leave food selection to the child's discretion.

Investigations revealed the possibility that children might "model" the anti-social or aggressive acts that they see on television. Research also showed that children model the television habits of their parents. Parents who view a lot of television have young children who do, too. Children view many violent programs simply because adults choose to watch these types of programs (Singer & Singer, 1976).

Parents often use T.V. as a means of reward or punishment. Using T.V. privileges for reward or punishment places too much emphasis and too much value on the medium. Parents who reward children with extra hours of television are endorsing it as something highly entertaining and desirable. Psychological learning theory suggests that the most appropriate and effective rewards and punishments are those that are related to the behavior that is to be rewarded or punished. For example, if a child deliberately throws a rock to break a window, one effective punishment would be to have the child help pay for the new window. Withdrawing T.V. viewing would be totally irrelevant punishment.

Parents should view television with their children instead of using it as a baby-sitter. Children, even as old as seven or eight, do very poorly at perceiving, organizing, and understanding information in T.V. programs and commercials. Before age five, children cannot distinguish reality from fantasy, and they believe what they see (Ambrosino, 1972). Adults can dramatically influence the information a child learns and retains from watching T.V. Parents can rephrase television dialogue, define difficult words, and make further explanation of the events that are portrayed during a T.V. program. Parents can often influence and change a young child's attitude. Families do not have to watch every program together, and parents do not have to feel duty-bound to appraise all content. "However, when the family does view together, if parents will make one or two comments during the show, they will have more impact upon the child than the whole program itself will have" (Corder-Bolz & O'Bryant, 1978, p. 23).

REFERENCES

- Ambrosino, L. Do children believe T.V. Children Today, 1972, 1 (6), 18-19.
- Corder-Bolz, C., & O'Bryant, S. Tackling the tube with family teamwork. Children Today, 1978, 7 (3), 20-24.
- Hurlock, E. B. Child development. New York: McGraw-Hill, 1972.
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- Read, K. H. The nursery school. Philadelphia: W. B. Saunders, 1976.

Singer, D. B., & Singer, J. L. Family television viewing habits and the spontaneous play of preschool children. In M. S. Smart & R. C. Smart (Eds.), Preschool children. New York: Macmillan, 1976.

SUGGESTED READINGS

National Science Foundation. Research on the effects of television advertising on children. Washington, D.C.: U.S. Government Printing Office, October, 1977.

Reports and findings on the effects of T.V. advertising on children.

Singer, D. G., & Singer, J. L. Family television viewing habits and the spontaneous play of preschool children. In M. S. Smart & R. C. Smart (Eds.), Preschool children. New York: Macmillan, 1976.

Discusses the relationship between television viewing and children's play.

Surgeon General's Scientific Advisory Committee. Television and social behavior (Volumes I-V). Washington, D.C.: U.S. Government Printing Office, March, 1972.

Readings and reports examining the relationship between televised violence and the attitudes and behavior of children.

LEARNING ACTIVITIES

1. Title: Observation

Description: Observe a child watching television. Fill in the observation form. Use as a basis for class discussion.

1. Age and sex of child
2. Name of television program
3. Subject matter presented in the show
4. Time of day
5. Describe any characteristics you observe

A. Physical appearance

1. Immobile or highly active
2. Uncommunicative or exceptionally talkative

3. Expressionless face or very expressive appearance
4. Blank stare or excited appearance

B. Interference with other activities

1. Sleep
2. Eating
3. Play with other children
4. Study or school work

6. Additional comments

Materials Needed: Copies of Child Observation Form--Influences of Television

2. Title: Survey

Description: Survey children on T.V. use.

1. What is your favorite television show?
2. How many hours a day do you watch television?
3. Who decides which television shows you may watch?
4. Do you ever watch television during mealtime? If so, which meal?
5. Do your parents ever talk to you about what happened on a television show?
6. What is your favorite commercial?
7. Do you have to finish your homework before you can watch television?
8. Who is your favorite male television character?
9. Who is your favorite female television character?
10. What are your parents' favorite television shows?

Materials Needed: Questionnaire

3. Title: Watching Children's T.V.

Description: From the survey above, determine a favorite children's television show. Videotape an episode. As a class, watch the show and list characteristics that make it good or bad for children. Notice the advertising. Does it make an appeal to children?

Materials Needed: Videotaping equipment

4. Title: Theme Song Game

Description: Make a tape of television theme songs and commercial jingles. Listen to the tape in class and identify the show or commercial. Rate the show or commercial and defend ratings using characteristics of good children's television discussed in class.

Materials Needed: Tape and tape recorder

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Make a bulletin board entitled "Be a Wise Egg" (Figure #58). The egg is made from a styrofoam egg cut in half lengthwise. Feet and nose are brightly colored construction paper. Eyes are buttons. Flowers could be placed on the board while discussing the effects of T.V. on children.

Materials Needed: Styrofoam egg, construction paper, buttons

EVALUATION

Title: Presentation

Description: Divide the class into groups of three or four. Have each group plan and present to the class a television commercial about "television for children." The commercial should be about one minute long. Try to convince parents to make wise use of television and suggest some alternatives to unsupervised, unplanned viewing. If this experience works well, the commercials could be worked on and presented to other groups, such as FHA or parent groups.

Materials Needed: Props

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BE A WISE EGG-
KNOW THE EFFECTS OF
EXCESSIVE TELEVISION
ON CHILDREN

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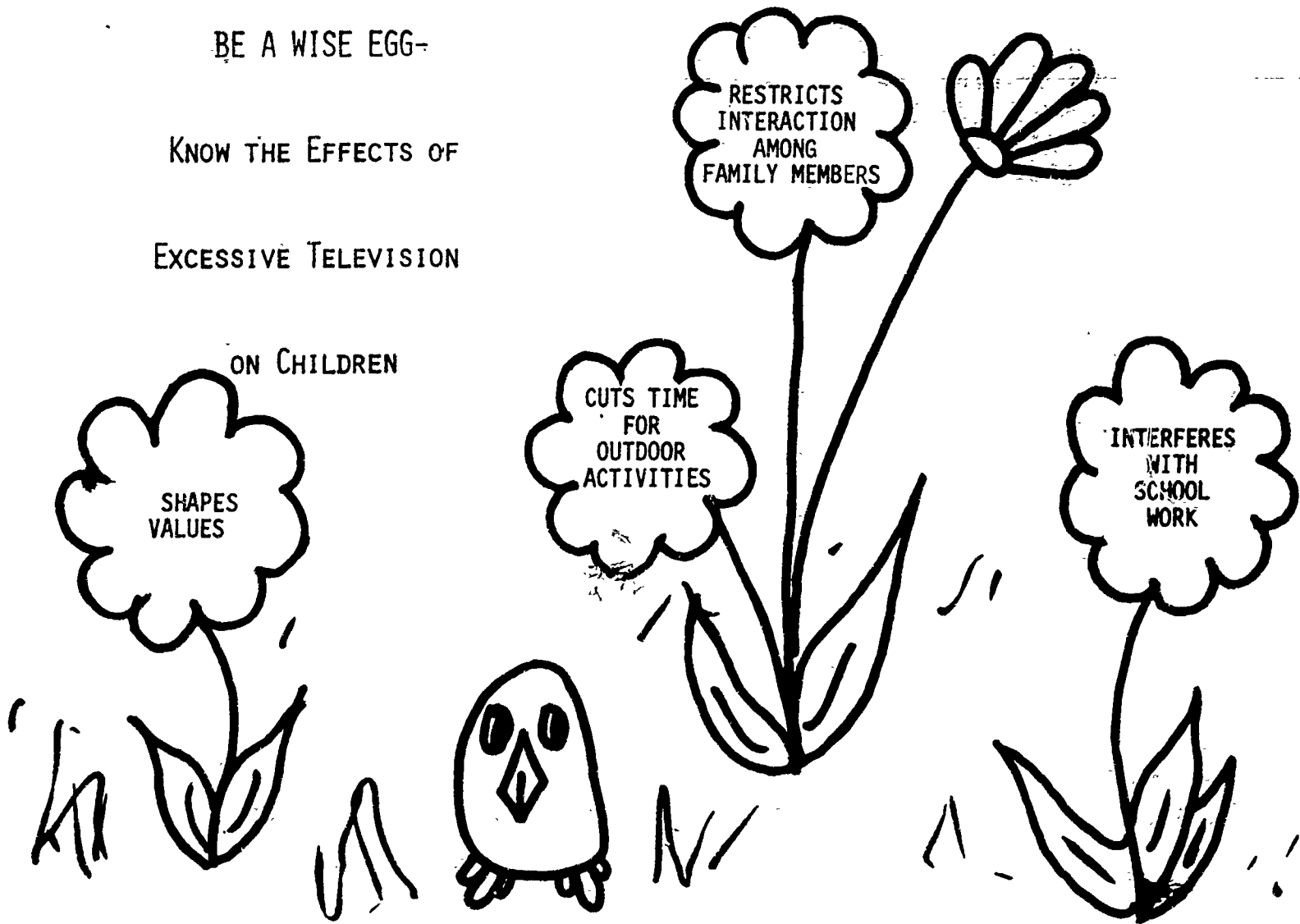


Figure #58

UNIT: Growth and Development of the Preschool Child

CONCEPT: Baby-Sitting

GENERALIZATIONS

1. Baby-sitting requires preparation and skills for dealing with children.
2. Many young people baby-sit during their teen years as a part-time job.
3. Baby-sitting is one way for a teenager to develop an understanding of children.
4. Baby-sitting experiences contribute to understanding the skills and knowledge needed for parenthood and for job success.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain some of the benefits of baby-sitting.
2. Discuss ways a person can prepare for a baby-sitting experience.
3. Discuss characteristics of a good baby-sitter.
4. List responsibilities of a good baby-sitter.
5. Demonstrate knowledge of the skills necessary in baby-sitting.

OUTLINE

- I. Importance of Baby-Sitting
 - A. Benefits for Baby-Sitter
 - B. Benefits for Children and Parents
- II. Preparation for Baby-Sitting
- III. Characteristics of a Good Baby-Sitter
- IV. Responsibilities of a Good Baby-Sitter
- V. Responsibilities of Parents
- VI. Emergencies-Accidents-Safety

VII. Playing with Children

VIII. Discipline

REVIEW OF SELECTED LITERATURE

Changes in American family habits and lifestyles since World War II have increased the demand for teenage baby-sitters (Hurlock, 1978). Over 1,000,000 teenagers baby-sit each year (The Pocket Guide to Baby-Sitting, DHEW).

Baby-sitting benefits include a chance to earn money, to learn what children are like, and to evaluate feelings about children. It involves preparation and skills for dealing with children and gives valuable job training for a possible future career.

The teenager has to adjust to new people, new places, and new situations with each baby-sitting experience. Baby-sitters learn to work with others, make decisions, and handle emergencies. A broader view of life is gained by seeing how other people live. The satisfaction of giving help where it is needed and of being valued and respected are other rewards of baby-sitting (Hurlock, 1978).

Children benefit from a baby-sitter, too. A child learns to accept and trust care givers other than family members. Parents benefit because the baby-sitter is a responsible person who takes care of their children when they are away from the child for business or pleasure.

Preparation for baby-sitting can begin by caring for children in the teenager's home or the home of a friend or a relative. Another way of preparing for baby-sitting is by reading books, articles in magazines, and pamphlets. Teaching a Sunday School class or doing volunteer work in a day nursery or with playground groups, or working with young scouts is also helpful. Some students study a unit in their school curriculum on child care or working with children. Red Cross chapters offer baby-sitting courses to teenagers who are interested in working with children (Dunn & Peeler, 1976; Hurlock, 1978).

Before taking on the responsibility of caring for children, a teenager should ask himself/herself these important questions:

1. Do I like children?
2. Am I responsible and dependable?
3. Do I enjoy being with children?
4. Do I think of a child's interests before my own?
5. Can I be firm when necessary?
6. Do I know how to act in emergencies?
7. Do I have a sense of humor?
8. Am I willing to work for the money? (Solsrud & Elling, 1972)

In addition, a good baby-sitter must want to do a good job and follow the parents' instructions (Dunn & Peeler, 1976). A baby-sitter

is different from a parent. The baby-sitter should devote almost 100 percent of his/her time and attention to taking care of the child (Ames, 1979).

The "Baby Sitter's Guide" lists the responsibilities and activities for baby-sitting. It is reprinted from: Human development and the family: A guide for teachers of home economics. State Department of Education--Division of Vocational, Technical, and Adult Education. University of Arkansas, Fayetteville, Arkansas, 1974.

"Baby Sitter's Guide"

1. Arrive a few minutes before parents leave to establish friendly relations with child or children.
2. Secure instructions for feeding, bathing, toileting, and sleeping arrangements.
3. Familiarize yourself with household and equipment:
 - a. Adjusting air conditioning (heating and cooling).
 - b. Operating kitchen range and electrical appliances.
 - c. Locating telephone, children's toys, clothing, etc.
4. Obtain telephone numbers of doctor, police, parents, other adults, fire department.
5. Use safety precautions to protect child. Example:
 - a. Keep dangerous objects (hot, sharp, poisonous, and others) out of reach.
 - b. Give medication only when instructed by parents.
6. Use your resourcefulness and imagination to keep the child happy in routine and emergency situations.
7. Be considerate and courteous:
 - a. Take accurate phone messages.
 - b. Operate T.V. only with permission.
 - c. Avoid inviting friends.
 - d. Bring own refreshments.
8. Anticipate entertainment needs of child and yourself:
 - a. Bring a kit of toys and play materials.
 - b. Bring book or magazine for use after child is asleep.

Parents should let the teenager know where they are during the time he/she is taking care of a child. The child's parents should leave a telephone number where they may be reached while gone or the number of a neighbor or a friend.

Parents of the child should make arrangements with the baby-sitter about the length of time they will be gone. Parents should try to stay within this time schedule or call the baby-sitter. Financial arrangements should be agreed upon before the baby-sitter takes care of the child. The baby-sitter should know what to do and how much pay will be given.

The baby-sitter should try to prevent accidents and keep the child safe by watching him/her at all times. Safety is best accomplished by prevention. The baby-sitter should know what to do in emergencies or accidents. Five important things to remember in case of an emergency are:

1. Keep calm.
2. Find out what is wrong.
3. Make the child comfortable.
4. If necessary, call for help.
5. If the injury is not serious, give first aid (Ames, 1979).

As a baby-sitter you can plan special activities to make the child look forward to their time together. Use a positive approach when talking to the child and commend the child when he/she has behaved correctly. Under no circumstances should physical punishment or abusive language be used. Threats of tattling to parents to get children to obey should be avoided. However, you should tell parents about any behavior that involves a child's safety and refusal to obey the baby-sitter.

REFERENCES

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.
- Dunn, M. D., & Peeler, M. Y. Living, learning, and caring. Lexington: Ginn, 1976.
- Human development and the family: A guide for teachers of home economics. State Department of Education-Division of Vocational, Technical, and Adult Education. Fayetteville, Arkansas: University of Arkansas, 1974.
- Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.
- The pocket guide to baby sitting. Children's Bureau. Department of Health, Education and Welfare Publication No. (OHD) 74-45, no date.
- Solsrud, L. O., & Elling, B. L. Understanding child development. Wisconsin: Homemaking Research Laboratories, 1972.

SUGGESTED READINGS

- Ames, L. B. Child care and development. Philadelphia: J. B. Lippincott, 1979.

An excellent book for students and teachers on caring for children. Each chapter has information at the beginning and end of the chapter that is very helpful to teachers and

students. There is a reference list and questions for study at the end of each chapter. There is a good teacher's manual that goes with the textbook.

Baby-Sitting where safety counts. Home Economics Newsletter, January, 1979.

An excellent publication for the teacher on teaching a lesson on safety in baby-sitting. It is concerned with preparing students on some aspects of child care - specifically meal-times and safety precautions.

Hildebrand, V. Parenting and teaching young children. New York: McGraw-Hill, 1981.

Easy to read. Information on infants and toddlers, three to six year olds. Activities to do with ages zero to six.

Hurlock, E. B. Child growth and development. New York: McGraw-Hill, 1978.

This is an easy reading textbook for students and teachers. It has information on all aspects of child care. Important information is blocked off to be given special attention. Each chapter is summarized by chapter highlights and suggested activities at the end.

McCarver, B. L. Once upon a time - A complete guide to baby-sitting. Arizona: Land O'Sun Printers, 1973.

A very good publication for students. It covers all areas of safety and accidents, a large section on creative crafts, and other topics about baby-sitting. It is very easy to read and usable for students.

The pocket guide to baby sitting. Children's Bureau. Department of Health, Education and Welfare Publication No. (OHD) 74-45, no date.

An excellent publication for students and teachers. It provides a great deal of information compiled together on baby-sitting.

A primer for Baby Sitters. Family Health, 8(10), 1976.

A good article for students on the responsibilities and characteristics of a person involved in baby-sitting children.

The super sitter. U.S. Consumer Product Safety Commission.

An excellent pamphlet for students on what to do to be a "super sitter" when baby-sitting. The pamphlet is short and easy to read.

LEARNING ACTIVITIES

1. Title: Sharing Session

Description: Divide the class into seven groups. Have each group read one of the following articles, discuss it, then share the information with the rest of the class.

Materials Needed: Laminated copies of articles

References: All of these are in the "Beyond Babysitting" series.

1. Child care problems. Co-ed, October 1978, p. 22.
2. Your problems solved! Co-ed, June 1979, p. 62.
3. Babysitting etiquette. Co-ed, September 1979, p. 46.
4. Emergency! Here's help. Co-ed, October 1979, p.44.
5. Problems with parents. Co-ed, March 1980, p. 60.
6. Your questions answered. Co-ed, January 1980, p. 60.
7. Make a babysitter's kit. Co-ed, December 1979, p. 56.

2. Title: Baby-Sitting Clinic

Description: Conduct an all-day clinic or series of shorter meetings for adolescents interested in baby-sitting. Topics such as child safety, discipline and the baby-sitter, and new game ideas could be included. Guest speakers such as a nursery school teacher and a nurse could be invited. A panel of parents could speak on their expectations of a baby-sitter. A group of adolescents who have done a lot of baby-sitting could talk about any problems they have encountered. Students could brainstorm for solutions.

Materials Needed: Vary according to plans

3. Title: Role Playing

Description: Role play situations that may confront a baby-sitter. Examples: (1) parents do not return at scheduled time; (2) the heating unit breaks down; (3) there is a phone call for the father; (4) five of your friends show up; (5) you're hungry; (6) parents do not pay the amount of money you expected; (7) child is banging on the piano; (8) parents hire you to baby-sit for one child, but when you arrive, there are three children; (9) child does not want to go to bed at scheduled time; (10) parents call you to baby-sit, but you are unavailable.

Materials Needed: None

4. Title: Baby-Sitting Bag

Description: Make a "baby-sitting bag" from large scraps of material from home or from the clothing lab. In the bag put items that will occupy a child such as a zipper, plastic toy train, car,

truck, beanbags, play phone, round-edged scissors, paper, colors, toy dishes, etc.

Materials Needed: Pieces of material, items that would interest a child

INSTRUCTIONAL AIDS

1. Title: Transparency

Description: Show "Advantages of Baby-Sitting" (Figure #59) transparency when discussing this topic.

Materials Needed: Transparency materials, overhead projector

2. Title: Booklet Sources

Description: The two booklets listed below would be good for students to keep with their baby-sitting supplies.

Sources: Guide for the first time babysitter. Consumer and Professional Services, Johnson & Johnson Baby Products, 220 Centennial Avenue, Piscataway, New Jersey 08854.

The super sitter. U.S. Consumer Product Safety Commission Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

EVALUATION

1. Title: Test

Description: Following are questions from "Beyond Babysitting" articles in Learning Activity 1.

1. What would be advantages of taking a baby-sitter's kit?
 - A. *Children present fewer discipline problems if occupied.*
 - B. *Children enjoy surprises.*
 - C. *If children enjoy having you for a baby-sitter, you are more likely to get more jobs.*
2. List several things that would be good to put in a baby-sitter's kit.

Suggestions: Board games, puzzles, crayons, soap bubbles (there are many suitable answers).

3. List some suggestions for finding jobs.

A. *See if other baby-sitters will recommend you when they can't work.*

- B. Tell people--teachers, church people, everybody.
- C. Post announcements on church bulletin board and in local supermarket.

4. List safety precautions that baby-sitters should observe.

- A. Keep toys picked up.
- B. Be aware of hazards.
- * C. When cooking, keep pot handles turned away from edge of stove.
- D. Roll up cords.
- E. Check on children often.

5. It is important for a baby-sitter to stay awake on most jobs. List some tricks to help you stay awake.

- A. Take a walk through the house.
- B. Exercise.
- C. Make a cup of tea or coffee.
- D. Splash cold water on your face.
- E. Don't take jobs that will be later than you can handle.

Write "true" in the blank if the statement is true or "false" if the statement is "false."

True 1. Don't baby-sit for strangers.

False 2. Play an active game before bedtime to tire the children so they will go to sleep on time.

True 3. The best way to prevent misunderstandings with parents is to agree on transportation plans, housecleaning chores, hours, and pay in advance.

False 4. Do not cancel a baby-sitting date at the last minute, even if you are sick.

True 5. When brother and sister fights reach the pinching, hitting, or shoving stage, separate the children.

True 6. The key advice for handling temper tantrums is not to get upset or excited.

False 7. Bedwetting may bother the baby-sitter, but will probably not disturb the older child.

True 8. When a child has had a bad dream, talk to him in a reassuring manner and remain in the room until the child goes back to sleep.

False 9. Chemical and heat burns are treated in the same way.

True 10. If a child's clothes are on fire, roll the child on the floor to smother the flames.

2. Title: Writing Assignment

Description: Select one of these and answer in writing.

1. Explain some of the benefits of baby-sitting.
2. Describe the responsibilities of a baby-sitter.
3. Discuss ways a young person can prepare for a baby-sitting experience.

Materials Needed: Paper, pen

Figure #59

ADVANTAGES OF BABY-SITTING

FOR THE PARENTS

1. OPPORTUNITY TO ENJOY SOME TIME FOR SELF



FOR THE CHILDREN

1. ACCEPTANCE OF OTHERS BESIDES PARENTS
2. INCREASED INDEPENDENCE
3. OPPORTUNITY FOR NEW EXPERIENCES

FOR THE BABY-SITTER

1. CHANCE TO EARN MONEY
2. OPPORTUNITY TO LEARN MORE ABOUT CHILDREN
3. PREPARATION FOR PARENTHOOD
4. WORK EXPERIENCE
5. SATISFACTION OF HELPING OTHERS

UNIT: Growth and Development of the Preschool Child

CONCEPT: Observation Experience

GENERALIZATION

1. Observation means watching behavior carefully and objectively.
2. Observation is a necessary link between knowing the principles of growth and development and applying them.
3. An important part of observation involves writing down what is observed.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify the value of observing and evaluating children's behavior.
2. Demonstrate a knowledge of the methods of observing.
3. Explain three types of development that can be evaluated when observing children.

OUTLINE

- I. Value of Observation
- II. Methods of Observing
 - A. Diary
 - B. Anecdotal Records
 - C. Selective
 - D. Time Samplings
 - E. Checklist
 - F. Others
- III. Types of Development Observed
 - A. Social
 - B. Emotional

C. Physical

D. Mental

E. Language

IV. Forms of Observation

A. Classroom Situations

B. Field Trip to Nursery School

C. Others

REVIEW OF SELECTED LITERATURE

A person can become aware of children's behavior and some of its causes by observing children. Awareness, which is knowing and understanding, can provide insights into how children grow, play, and live and what their needs are. Observation means watching behavior carefully and objectively. The observer should not make judgments or interpretations. To be able to observe behavior objectively takes both time and practice (Terry, Sorrentino, & Flatter, 1979).

Observation makes the study of children more meaningful. The observer will learn to see clues and collect information about children's development and behavior (Draper & Draper, 1977).

Observing and recording what is seen helps the observer recognize patterns, rates, and stages of development. Individual differences, as well as the effects of environment on each child can be seen (Draper & Draper, 1977).

Behavior should be observed in totality and should be seen in the context of surrounding circumstances. What other children are doing, the physical aspects of the setting, and what adults in the setting are expecting of the children should all be noted. The child should be observed as a total being. Physical features of the child, what he/she is wearing, the voice inflections, the body posture, and the cues the child is giving by words and physical movements should be noted (Terry et al., 1979).

An important part of observing children involves writing down what is observed. A diary is one of the forms of written observation. Maintaining a diary involves writing down the time and behavior observed in the child. The anecdotal record is a way of observing that involves writing down episodes of an individual child's behavior. Proper keeping of the record should include the date, time, place, actions, quotations, and gestures about a situation. Another similar method of record-keeping is selective observation. The observer selects the behavior of the observed child he/she is most interested in and records it. Time samplings are written records of behavior of a child or children made at

specific times of the day. The observation is made at a specific time rather than of a specific activity. It is used in a limited time period and in a given setting. The observer will accumulate a record of different types of behavior. A checklist involves checking specific activities or traits that are observed in the child. An observer can use a sociogram and record the interactions of the observed child with other children.

Other types of recorded observations include short phrases or words that describe one or several children in a certain setting, time of day, or activity. Another way of observing children is to answer specific questions about a child's social, emotional, physical, or mental activities as the observer sees them happening. The observations are sometimes written in the form of a case study.

An observer can observe several types of development in children. Social development can be observed by watching the people the child relates to and observing whether he/she initiates the relationship or waits for someone else to do it. Emotional development can be determined by watching the emotions the child expresses, how often they are expressed, and what caused the emotions. Physical development can be observed by comparing norms of the child's age with how well coordinated he/she is for that age. A determination can also be made as to how well the child uses play equipment and whether the use of large or small muscles is required. Mental development can be observed in the child's attention span and especially in children who are curious, creative, have good memories, and can solve problems for themselves. Language development can be observed by listening to the child to note if single words, phrases, or whole sentences are used when talking, how often the child talks, and the different words that are used in a conversation (Vocational Home Economics, 1977).

REFERENCES

- Draper, H. E., & Draper, M. W. Studying children: Observing and participation. Peoria, Illinois: Charles A. Bennett, 1977.
- Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. Dallas: McGraw-Hill, 1979.
- Vocational home economics job training resource guide for child care service. State Department of Education--Division of Vocational Education. Columbus, Ohio, 1977.

SUGGESTED READINGS

- Baker, K. R., & Fane, X. F. Understanding and guiding young children. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.

A good text on young children for teachers and students. The print is easy to read and understand.

Clarey, J. A. A hands-on experience. Forecast for Home Economics, February 1979.

Article on home economics students' learning about child development through real-life experiences. L. B. Landry High School in New Orleans, La. developed the program that is written about in the article. Suitable for students and teachers.

Draper, H. E., & Draper, M. W. Studying children: Observing and participating. Peoria, Illinois: Charles A. Bennett, 1977.

A very good workbook type of book for students and teachers. It has good information on observing children and several examples of observation sheets to be completed by students.

Hildebrand, V. Guiding young children. New York: Macmillan, 1975.

Good book with emphasis for teacher on the process of guiding and teaching young children. Information is given on the international opportunities of caregivers, teachers, parents, and children themselves to develop the human potential of children.

Hildebrand, V. Introduction to early childhood education. New York: Macmillan, 1971.

Good for teacher to read and use in working with young children. Good information on how to work with young children.

Quanty, C. B., & Davis, A. Observing children: A child development manual. New York: Alfred Publishing, 1974.

A good textbook for teachers and students. Provides guidelines and examples for observing the behavior of preschool children. It includes observation sheets and instructions on how to observe children.

Read, K. H. The nursery school: A human relationships laboratory. Philadelphia: W. B. Saunders, 1971.

A good textbook for teachers on information about a nursery school. Chapter 9 has good information on making observations.

Terry, S. G., Sorrentino, J. M., & Flatter, C. H. Children: Their growth and development. Dallas: McGraw-Hill, 1979.

A good (paperback) book for students and teachers with a section on observing children. The chapter summary, along with projects, decision, issues, and observations by the reader at the end of the chapter, are very useful for the teacher.

Vocational home economics job training resource guide for child care service. State Department of Education-Division of Vocational Education - Home Economics Section, Columbus, Ohio, 1977.

An excellent curriculum guide for teachers with a section on observations and evaluation. Guide includes tasks, suggested student learning experiences, teaching aids, and a bibliography. It has several forms for students to use to make observations.

LEARNING ACTIVITIES

1. Title: Film

Description: Introduction--This film is about a group of children exploring in their backyard. The children find small creatures and enjoy seeing how they adapt to their surroundings, how they travel, and how some have protective characteristics. View the film without sound. Then discuss these questions: Is there a leader? How do the children share? Do the children cooperate? List as many small creatures seen in the film as can be remembered. View film with sound. Elaborate on above questions; discuss additional insight gained from the second viewing with sound.

Materials Needed: Film, projector (Any film could be used if previewed first and introductions and questions adapted.)

Source: Film--Wonders in Your Own Backyard. (Churchill Regional Film Library) Louisiana Tech University; Ruston, La. 71272. Free loan, cost of return postage.

2. Title: Pictorial Observation

Description: Show students the transparency entitled "Observation" (Figure #60). Allow three minutes for noting details. Turn off overhead. Answer these questions. How observant are you?

1. How many birds are on the roof?
2. How many chairs are at the dining table?
3. How many children are asleep in the bedroom?
4. Who's at the front door?
5. What has been left on the dining table?
6. How many pictures are on the living room wall?
7. What is on chest in children's room?
8. Is chimney on front or back of house?
9. What is in the chair in the baby's room?
10. What is on the floor in front of the sofa?

Materials Needed: Transparency, overhead projector

3. Title: Field Trip

Description: Visit a local day-care center. Choose one child to observe carefully and complete the "Observation Form" (Student Handout #25) pertaining to related information. Find information concerning that child, such as number in family, age of parents, home conditions, working conditions of parents, nuclear or extended family, and any other factor you feel would influence the child's growth and development.

Materials Needed: Permission from principal, arrangements with day care center, transportation arrangements, permission slips, observation forms

4. VOCABULARY

1. Diary--Written observation that involves recording time and behavior of child.
2. Anecdotal Record--Writing down episodes of child's behavior.
3. Selective Observation--Recording only certain behavior.
4. Time Samplings--Written records made at specific times of the day.
5. Checklist Observation--Involves checking specific activities that are observed in a child.

INSTRUCTIONAL AID

Title: Transparency

Description: Use a transparency entitled "Methods of Observation" (Figure #61) when discussing methods of observation and types of development that can be observed.

Materials Needed: Transparency materials, overhead projector

EVALUATION

Title: Written Quiz

Description: Use the following questions as a basis for evaluation.

Write "true" if the statement is true, "false" if it is false.

- False 1. In most kinds of observations, the observer watches a child closely and then forms an opinion of why certain behavior takes place.

- True 2. One of the best ways to learn the stages of development is through observation.
- False 3. During observations, try to disregard surrounding circumstances.
- False 4. Selective observations are written records of behavior of a child made at specific times of the day.
- True 5. A sociogram is a method of showing how a child interacts with other children.

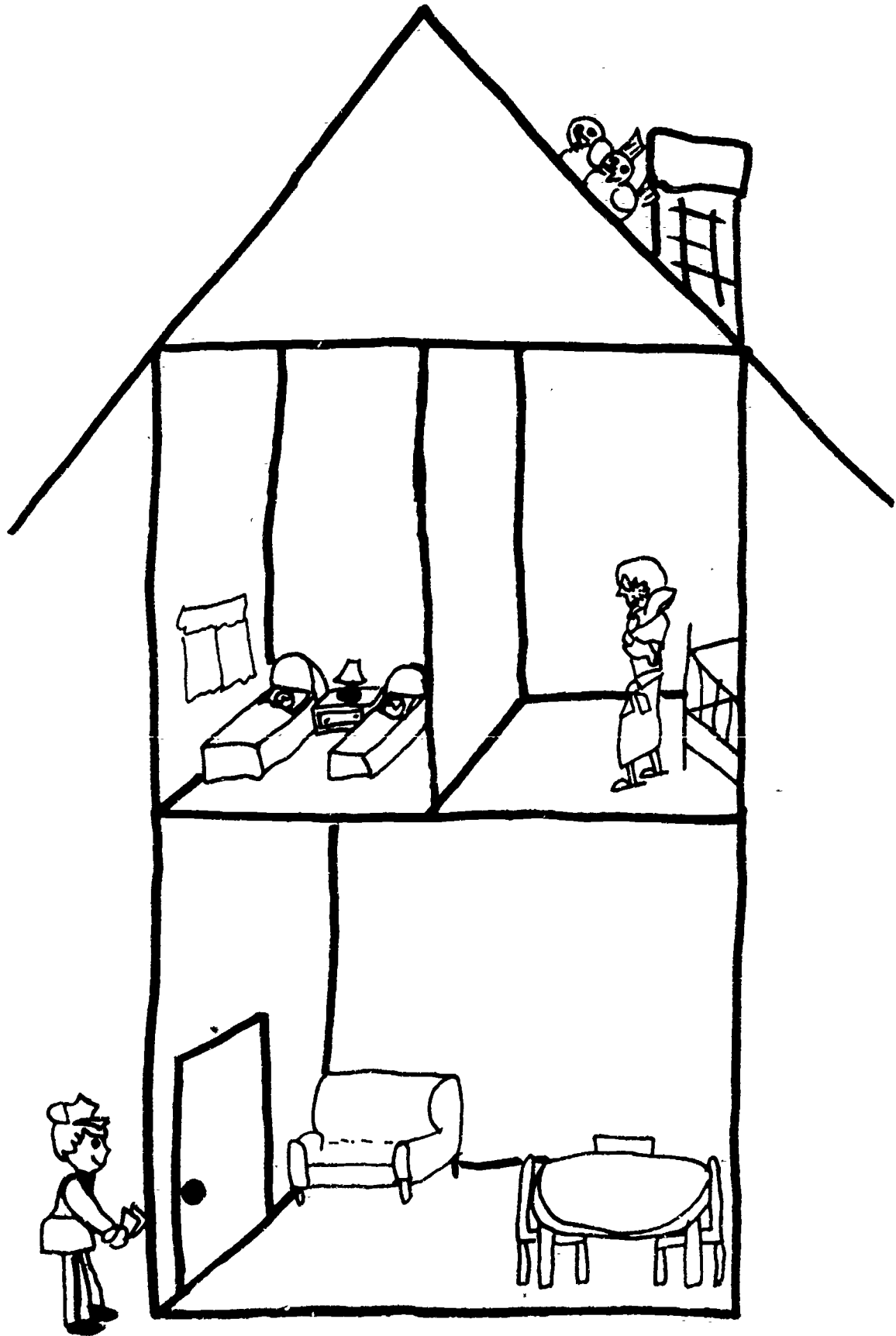
Identify and match those behaviors that can be observed in order to evaluate different types of development.

- C 6. Social Development
- A 7. Emotional Development
- E 8. Physical Development
- B 9. Mental Development
- D 10. Language Development

- A. Observe how a child expresses feelings.
- B. Observe the child's attention span, curiosity, and creativity.
- C. Observe the people the child related to and whether he/she initiates the relationship or waits for someone else to.
- D. Observe if the child uses single words, phrases, or whole sentences.
- E. Observe how well the child uses play equipment.

Materials Needed: Copies of quiz

Figure #60



METHODS OF OBSERVATIONS:

1. DIARY
2. ANECDOTAL RECORDS
3. SELECTIVE OBSERVATIONS
4. TIME SAMPLING
5. CHECKLIST

TYPES OF DEVELOPMENT OBSERVED:

1. SOCIAL
2. EMOTIONAL
3. PHYSICAL
4. MENTAL
5. LANGUAGE

Figure #61



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UNIT LEARNING ACTIVITIES (Growth and Development of the Preschool Child)

1. Title: Baby-sitting Kit

Description: For most of the lessons in the unit, brainstorm ideas of things that could be included in a baby-sitting kit. Examples-- Nutrition and health care--snack recipes, first aid kit. Mental growth and language development--puzzles, books, records, a counting game. Emotional and self-concept development--puppets, dress up clothes, certain books or stories. Physical development--ball, blunt scissors. Make some of these and put together a baby-sitting kit.

Materials Needed: Varies with projects chosen

2. Title: Construction of a Busy Book

Description: Construct a busy book for a youngster. Try to be as creative as possible.

Materials Needed: An example of a busy book, other materials will vary

Source: The Learn by Doing Book in 4-H Project manual in child development-Unit-3-share your talents with children. Available from local parish extension office. Copies for students available if some advance time is given.

3. Title: Knock-Knock Jokes

Description: Make up some knock-knock jokes that ask questions about the development of the preschool child or answer these.

Knock! Knock!
Who's there?

1. Canoe
Canoe who?
Canoe name three advantages of baby-sitting?

Chance to earn money, learn more about children, preparation for parenthood, work experience, satisfaction of helping others, some time for parents, children learn to accept others, have new experiences, accept others.

2. Jess
Jess who?
Jess wondering if you know what parallel play is?

A child plays near another child but not with the other child.

3. Eyes
Eyes who?
Eyes wanted to know 5 methods of observation.

Diary, anecdotal records, selective observations, time sampling, checklist.
4. Sherwood
Sherwood who?
Sherwood like to know the difference between active and passive play.

In active play the child is doing the action and expending energy while in passive play the child watches the action with little energy being expended.
5. Shirley
Shirley who?
Shirley you know 3 examples of gross motor movements.

Walking, running, jumping, swimming
6. Sadie
Sadie who?
Sadie Basic 4 Food Group requirements for the preschooler.

Milk group--2 to 3 cups, Meat group--2 servings, Vegetables and fruits group--4 servings, Bread and cereal group--4 servings.
7. Phyllis
Phyllis who?
Phyllis in on a guide for determining serving size of foods.

One tablespoon of food for each year of age. This is only a guide; larger or smaller portions should be provided to satisfy the child's appetite.
8. Police
Police who?
Police tell us about how children learn the emotion fear.

Through direct association with stimuli that naturally arouse fear, imitation, unpleasant experiences, from tv, movies, and fairy tales.
9. Lisa
Lisa who?
Lisa you can do is tell me three styles of discipline.

Authoritarian, permissiveness, developmental

10. Justin
Justin who?
Justin time to tell us the term that means the ability to think or reason and to cope with environment.

Intelligence

11. Dewey
Dewey who?
Dewey know four common speech errors of pronunciation found in preschoolers.

Baby talk, lisping, slurring, stuttering, and stammering

12. Deanna
Deanna who?
Deanna-mals are restless--tell them four factors that influence physical growth and development.

Heredity, environment, physical defects, illness, security

13. Celeste
Celeste who?
Celeste time I am going to ask what is the simplest form of cognitive behavior.

Memory

14. Atlas
Atlas who?
Atlas! No more knock-knock jokes.

UNIT INSTRUCTIONAL AID

Title: Bulletin Board

Description: Caption a bulletin board "Focus on the Preschool-Aged Child." Under this title display three photographs of a group of preschool children. One photograph should be out of focus, one should be slightly out of focus, and one should be very clear and sharp. The first picture is snapshot size, the next one should be a 5x7 enlargement, and the clear picture should be an 8x10 enlargement.

Materials Needed: Background, letters, three photographs

UNIT EVALUATION

Title: Written Unit Test

Description: Below are some questions that could be used as a basis for unit exam.

Write "true" in the blank if the statement is true or "false" if the statement is not true.

- True 1. To help children in speech development, adults should talk clearly and correctly.
- False 2. A reward is a promise given ahead of time to encourage good behavior.
- True 3. Shyness is a form of fear.
- True 4. Rivalry is common between children competing for adult attention.
- True 5. For the preschool child aggression or hostility is likely to be strongest during fatigue periods.
- False 6. Watching television is an example of active play.
- True 7. Height and weight increases are slower during the preschool years than during infancy.
- False 8. It is usually a good idea for a baby-sitter to arrive just before the parents leave.
- True 9. Positive reinforcement is a method of guidance that involves rewarding desired behavior.
- True 10. Ridicule and shame should not be used as a discipline technique because of the negative effect on self-concept.

Read each of the following statements. Select the best ending and write the letter in the blank.

- C 11. Repeating a letter, a syllable, or a whole word several times is
- A. lispng
 - B. slurring
 - C. stuttering
 - D. stammering
- B 12. After a child has made a speech error, probably the best response from an adult is to
- A. ignore the error
 - B. repeat the sentence correctly and continue with the conversation
 - C. punish the child so that the error will be remembered
 - D. none of the above

- D 13. A disadvantage of physical punishment is
- A. it may make the child feel worthless
 - B. it does not teach self-discipline
 - C. it gives the child a violent model to copy
 - D. all of the above
- D 14. Children learn emotional responses through
- A. trial-and-error
 - B. imitation
 - C. conditioning
 - D. all of the above
- B 15. Riding a tricycle helps a preschooler develop
- A. small muscle skills
 - B. large muscle skills
 - C. eye-hand coordination
 - D. all of the above
- D 16. Before learning to write and draw, the child must develop
- A. eye-hand coordination
 - B. small muscle skills
 - C. a sense of balance
 - D. all of the above
- D 17. All of the following are factors affecting intelligence except
- A. heredity
 - B. diet
 - C. experiences
 - D. all of the above are factors
- A 18. A form of written observation is a
- A. diary
 - B. theme
 - C. composition
 - D. none of the above
- C 19. Observing a child's attention span, curiosity, and creativity can indicate
- A. physical development
 - B. social development
 - C. mental development
 - D. all of the above

B. 20. Language ability is a reliable indication of

- A. a neglected child
- B. intellectual development
- C. social skills
- D. all of the above

21. On his first day at kindergarten, Bobby cries when his mother starts to leave. His mother says, "What in the world is the matter with you? Why are you acting like a baby?" Evaluate the effects of the mother's response.

Bobby is probably feeling insecure and is expressing this insecurity in the only way he knows. His mother should try to preserve his self-respect and show her understanding of the situation. The above response would not help Bobby understand his emotions better or express them. His self-concept would not be influenced in a positive manner. A better response might be "Everything seems strange on the first day of school. I know it's a little frightening, and I will stay for a while, so that you can get to know your teacher."

22. A. Plan a day's meals and snacks that are nutritionally adequate for a preschool child. B. How much food is usually considered a serving?

A. *Menus should include at least two to three cups of milk or milk substitutes, two servings of meat and protein foods, four servings of vegetables and fruits, and four servings of breads and cereals.*

B. *For meat, fruit, or vegetable one tablespoon per year of age is considered a guide for determining serving size. One slice of bread or one-half cup cooked cereal, rice, or macaroni is considered a serving for four- to six-year-old children.*

23. Most children enjoy music. Describe easy homemade musical instruments.

Drums made from cans, wooden bowls, or nail kegs; cymbals made from two lids of pans; bells on sticks or elastic wrist bands; rattles from small boxes with rice or dried peas inside; or tambourines from bottle caps on embroidery hoops.

24. Before parents leave, the baby-sitter should get several telephone numbers. Name these.

Doctor, police, fire department, parents, other adult (maybe a next door neighbor).

Materials Needed: Copies of the test

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Developmental Tasks and Basic Needs

GENERALIZATIONS

1. For each stage of living, there are certain tasks that an individual is expected to accomplish, based on the level of physical development, societal demands, and inner aspirations or motivations.
2. During middle childhood, there are nine developmental tasks upon which later growth and development depend; failure to accomplish these tasks will impede future progress.
3. Certain needs are basic to the human race and must be met for optimal growth and development; these needs are manifest in various ways at differing ages.
4. Failure to meet a person's basic needs can affect all aspects of his or her development.
5. Guidance of children toward accomplishment of the developmental tasks of their age and toward basic needs fulfillment aids total growth and development.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Enumerate the nine developmental tasks of middle childhood.
2. Explain how failure to accomplish developmental tasks could impede future growth and development; how accomplishment would facilitate progress.
3. Delineate some of the basic needs of man and tell how these needs are manifest in children during school age.
4. Discuss how basic guidance approaches can help in developmental task accomplishment and basic needs fulfillment.

OUTLINE

I. Developmental Tasks

- A. Related to Culture, Physical Development, Internal Motivation
- B. Accomplishment Facilitates Future Progress
- C. Failure to Accomplish Impedes Future Progress
- D. Tasks for Middle Childhood

II. Basic Needs

- A. Physiological
- B. Safety
- C. Love and Belonging
- D. Esteem
- E. Self-Actualization

III. Need Fulfillment

REVIEW OF SELECTED LITERATURE

During the school-age period of life, children are developing perceptions of what the world expects of them, and they have many inner pushes and pulls that contribute to their desire to please adults and to do "what is right." Although they are not aware of specific tasks they should accomplish in order to further progress in life, they are almost unconsciously working on such tasks as Havighurst has delineated and called "developmental tasks" (Havighurst, 1952). For the child aged six to twelve, who is in the middle childhood stage, these developmental tasks include:

1. Learning physical skills necessary for ordinary games.
2. Building wholesome attitudes toward himself or herself as a growing organism (self-concept).
3. Learning to get along with age-mates.
4. Learning an appropriate masculine or feminine social role.
5. Developing fundamental skills in reading, writing, and calculating.
6. Developing concepts necessary for everyday living.
7. Developing conscience, morality, and a scale of values.
8. Achieving personal independence.
9. Developing attitudes toward social groups and institutions.

At the base of their ability to accomplish these tasks is their physical well-being, which allows them to learn, to socialize, to experience their expanding world, and to progress through their experiences. All aspects of growth are interrelated, so that a problem in the physical well-being affects emotional functioning, social interaction, and mental abilities. Likewise, emotional upsets impinge upon physical well-being; social problems handicap mental faculties. The need to progress in all areas of life is basic to a feeling of self-adequacy or good self-esteem (Maslow, 1970).

Adults in a child's life are the major facilitators for accomplishment of the developmental tasks and basic needs fulfillment. When adults realize what the child is trying to do and that his future growth and development depend upon task accomplishments, they can be more helpful resources. Understanding that behavior is a function of

growth status and needs fulfillment or denial is paramount in living successfully with children.

Physical development is the first determiner of things a child is able to do. Skill depends upon physical development, incentive, practice, body size, and attitudes of adults toward the skill. The American culture values such social abilities as verbalization, independence, and friendliness.

During middle childhood, indications of basic needs may be seen in a hungry child's crankiness, in a sleepy child's inability to share, in a rejected child's aggression, in a fearful child's shyness, in a bored child's failing grades in school. According to Maslow (1970), human needs may be arranged in a hierarchy. Physiological needs have first priority. These include food, water, shelter, warmth, clothing, sleep, and sex. They are necessary for good health, a state of well-being, and the continuation of life.

Maslow listed safety needs as second priority. One needs to feel free from danger and to feel secure in daily routines. The basis for Maslow's third level of human needs is love. One has a need to receive love, affection, care, and attention in order to feel accepted by others and secure in relationships with family members and friends. Esteem in interpersonal relationships is listed as Maslow's fourth basic need. One has a need to develop self-esteem or a sense of personal worth in order to respect oneself and others. The last category in Maslow's theory of basic needs is self-actualization. To reach this level, all other levels of need must be at least partially fulfilled. When a person reaches self-actualization, a belief in himself or herself is achieved. A person has acquired the confidence to express his/her beliefs and to reach out to others to offer support.

Peer groups reward the child who is physically skilled in sports and games and punish the child who is not coordinated or physically talented. Children are judged on their physical appearance by their peers. With school entrance, the child's social world expands, and he/she must learn to share the attention of adults and to make friends. The school provides the major opportunity to follow rules and to compete and cooperate with age-mates.

During middle childhood, children receive encouragement to further solidify early identification with sex-role models found in parents. The peer group assists the child in learning "boyiness" and "girliness," and the sex cleavage common around ages nine-ten provides support for sex-role learning and practice.

During the middle years, the nervous system matures to that point to permit learning of abstractions, and the hand and eye muscles develop to allow reading of print and manipulation of writing instruments. By school entrance the child has a store of several hundred concepts, and this number swells to several thousand in middle childhood. Correct concepts lead to expanded concepts throughout life. In early childhood, children learn there is a difference in good and bad, but during middle years, they learn what these differences are. Through reward and punishment, children develop within themselves the warning voice of conscience

By age eight, the child is generally accountable for his/her acts and aware of transgressions. This awareness does not mean behavior is perfected--misbehavior occurs primarily through lack of good judgment, rather than lack of knowledge of what is right and wrong.

Success in the peer group and expanding knowledge lead the child of the middle years to realize that adults are not infallible. He/she begins to be free from dependence upon them and relates more to age-mates. The child, spending more time away from home and family, becomes more responsible for his/her own safety and use of time. He/she moves toward more and more self-sufficiency and independence.

The basic social attitudes are acquired by imitation of people with prestige and by experiences. Children in middle childhood are gathering perceptions of groups and institutions in the society which will remain with them throughout life. Religious and racial tolerance, respect of others' rights and freedoms, political ideologies and international cooperation are taught and learned in these formative years.

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- Maslow, A. Motivation and personality. New York: Harper & Row, 1970.
- Williams, J. W., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan Publishing, 1980.

LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Invite a physical education teacher to speak of physical skills that a school-aged child should have. If the child lacks these skills, what exercises could help in their development?

Materials Needed: Letter confirming time and date and thank you letter

2. Title: Crossword Puzzle

Description: Fill in the "Tasks and Needs of the School-Aged Child" (Student Handout #26) puzzle.

Key:

Across

Down

3. *Right*
5. *Over*
9. *Adults*
10. *Concept*
12. *Role*
14. *Lad*

1. *Judgment*
2. *Emotional*
4. *Rules*
6. *Religious*
7. *Socialize*
8. *Peer*
11. *Needs*
13. *Learn*

Materials Needed: Copies of puzzle

3. Title: Making Posters

Description: Using old family and educational magazines, find pictures of school-aged children that illustrate the following statements. Cut out pictures, glue to construction paper, label with statement, and laminate. Hang these in classroom and use as a basis for discussion.

Statements:

1. All aspects of growth are interrelated to the degree that a problem in the physical well-being affects emotional functioning, social interaction, and mental abilities.
2. Adults in a child's life are the major facilitators for accomplishment of developmental tasks and basic needs fulfillment.
3. The American culture values such social abilities as verbalization, independence, and friendliness.
4. Children are judged by their peers on the basis of physical appearance and physical skills.
5. By age eight, the child is generally accountable for his behavior. Misbehavior occurs primarily through lack of good judgment rather than lack of knowledge of what is right and wrong.
6. Basic social attitudes are acquired by imitation of people with prestige and by experience.

Materials Needed: Magazines, scissors, glue, construction paper, markers, laminating materials

4. VOCABULARY

1. Physiological needs--Needs related to physical well-being, such as needs for food, water, and shelter.
2. Socialize--To become social; to relate to social values and customs.
3. Verbalize--To express oneself precisely.

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Use "Everybody has a Job" (Figure #62) bulletin board to teach tasks of middle childhood.

Materials Needed: Want Ad section of newspaper, paper, markers

EVALUATION

Title: Writing Assignment

Description: Write a paragraph on how you feel failure to accomplish developmental tasks could impede future growth and development and how accomplishment would facilitate progress.

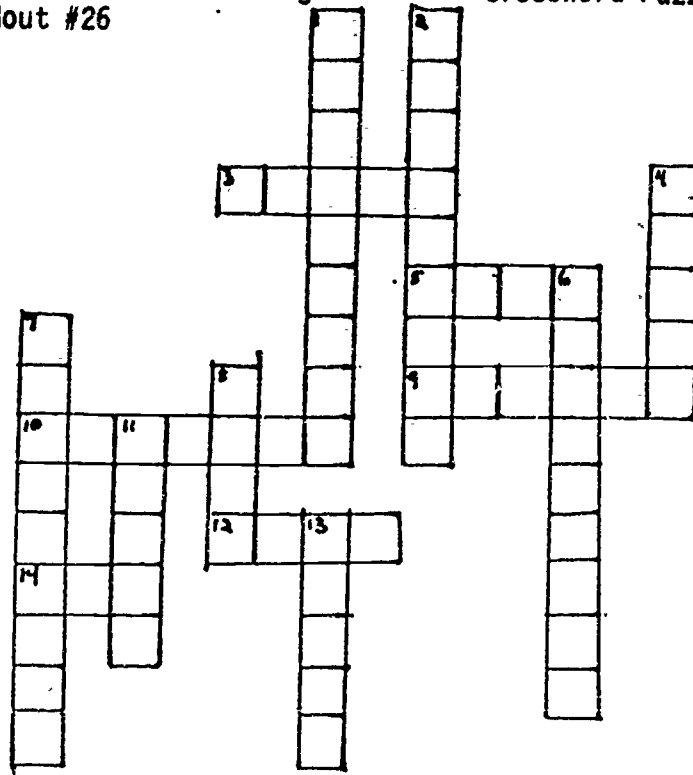
Materials Needed: Paper, pen

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Figure #62

EMPLOYMENT	EMPLOYMENT	EMPLOYMENT
<p>_____</p> <p>_____</p>	<p>_____!! _____?</p> <p>_____</p> <p>_____</p>	<p>_____!</p> <p>_____</p> <p>_____</p>
<p>(29) PROFESSIONAL</p>	<p>_____</p> <p>_____</p>	<p>_____</p> <p>_____</p>
<p>_____</p> <p>_____</p> <p>_____?</p>	<p>Everybody</p> <p>has a</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p>_____?</p> <p>_____?</p> <p>_____</p> <p>_____</p>	<p>JOB!</p>	<p>_____</p> <p>_____!</p> <p>_____?</p>
<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>WANTED</p> <p>A child who:</p> <ol style="list-style-type: none"> 1) has good physical skills 2) has a good self-concept 3) can get along with friends 4) is learning appropriate sex roles 	<p>_____</p> <p>_____!</p> <p>_____?</p> <p>_____</p>
<p>_____?</p> <p>_____</p> <p>_____</p>	<p>NEEDED IMMEDIATELY</p> <p>A school-aged child who:</p> <ol style="list-style-type: none"> 1) has fundamental school skills and has basic concepts needed for everyday living 2) is developing morals 3) is achieving independence 	<p>_____?</p> <p>_____</p> <p>_____!</p>
<p>(30) Clerical/Office</p>	<p>_____!!!!</p>	<p>(34) Sales Opp't</p>
<p>_____?</p>	<p>_____</p>	<p>_____!</p>
<p>_____</p> <p>_____</p>	<p>_____</p>	<p>_____</p>
<p>_____</p>	<p>_____</p>	<p>_____</p>

Tasks and Needs of the School-Aged Child - Crossword Puzzle
 Student Handout #26



TASKS AND NEEDS OF THE SCHOOL-AGED CHILD

Across

3. Most school-aged children want to "do what is _____."
5. Opposite of under.
9. Success in the peer group and expanding knowledge lead the child to realize that _____ are not perfect.
10. Building a strong self-_____ is a major task of the early school years.
12. Middle childhood is a time of reinforcement of sex-_____ development.
14. A young man or boy

Down

1. Misbehavior at this age occurs mostly because of lack of _____ rather than lack of knowledge of what is right or wrong.
2. _____ health will affect physical health.
4. School offers an opportunity to learn to follow _____.
6. _____ and racial tolerance are taught and learned during these formative years.
7. Middle childhood is a time to learn to _____ with friends.
8. A friend of about the same age.
11. All people have basic _____.
13. School offers opportunities to _____ to compete and cooperate with others.

UNIT: Growth and Development of the School-Aged Child

CONCEPT: The Physical Self: Body Changes and Abilities

GENERALIZATIONS

1. Growth between ages six and twelve is slow but steady; with many body structures following the normal growth curve: skeleton, muscles, face, and organs.
2. Motor development is active and expanding and skills improve in rough linear form.
3. Growth and motor abilities are related to state of health, nutrition, rest, and exercise.
4. The recreational interests during this age are varied and numerous.
5. There are some differences in the body contours and motor abilities of boys and girls in middle childhood.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Characterize growth of middle childhood, delineating some specific changes which occur in the body.
2. Discuss some of the components of motor ability and tell how these are evidenced by middle childhood people.
3. Briefly explain how health, nutrition, rest, and exercise relate to growth and motor skills.
4. Mention some typical differences in boys and girls with respect to motor skills.

OUTLINE

I. Growth and Physical Changes

A. Pituitary Gland Secretes Growth Hormone

1. Acts to stimulate growth of bones and protein production
2. Produced in response to body stimuli
3. Assisted by other hormones, particularly thyroid hormones

B. Typical Body Changes

1. Structures which follow normal height curve
 - a. skeleton, face, muscles
 - b. liver, spleen, kidneys

2. Structures developing faster than normal height curve
 - a. brain, skull
 - b. eyes and ears
3. Structures developing slower than normal height curve
 - a. reproductive organs
4. Body contour changes
5. Internal changes

II. Motor Development

A. Heredity Primarily Determines Motor Potential

1. Environment determines achievement of genetic potential
2. Maturation must precede learning
3. Training prior to maturational readiness may have damaging effects

B. Motor Skill Components

1. Strength
2. Flexibility
3. Impulsion, or the initiation of movement from stationary position
4. Speed
5. Precision

REVIEW OF SELECTED LITERATURE

Growth of the body during middle childhood is slow but steady until the onset of puberty late in the period. Growth is under the influence of the endocrine system, the endocrine gland being predominant in stimulating other glands concerned with growth: thyroid, adrenal, and gonads. The pituitary gland secretes the growth hormone somatotrophin, which directly stimulates the growth of bones and the production of protein. It is only secreted when certain conditions exist in the body: rapid lowering of blood sugar, rise in certain amino acids, physical exercise, and emotion. The thyroid gland acts primarily on the brain, teeth, and bones and plays a part in maintaining proper proportions and regulating the production of energy and the metabolism of food. Puberty is triggered by the pituitary action on the adrenals, on the ovaries in girls, and testes in boys. Estrogen in girls and testosterone in boys brings about the maturation of the reproduction system and such secondary sex characteristics as breast development, pubic hair, and beard (Tanner & Taylor, 1969). Sex, birth weight, body build, nutrition, exercise, and rest also contribute to normal growth patterns in children.

During the years six through twelve, children grow steadily, but various parts of the body progress at different rates. Many structures follow the general pattern of the skeleton: the muscles, liver, spleen, kidneys, and face. The brain and skull, eyes, and ears develop faster than other body parts, while the reproductive organs develop more slowly. Development generally proceeds from head to toe, and body contours change as the abdomen flattens and hips widen. The face changes shape as the forehead flattens; in boys, cheekbones become more prominent. The arms and

legs grow longer and more slender, and the waist becomes more defined. Hands and feet grow more rapidly, as does the nose. Girls' contours are rounder owing to fat distribution; boys' contours are more angular because of muscle development. School readiness may be partially indicated by the body configuration; body maturity correlates with first-grade achievement. The calcification of the wrist bones has been used in some school systems to screen beginning students, for the skeleton is a true common scale of development. Shedding of teeth is another indication of developmental status.

During middle childhood, weight gain is constant and is an indication of both physical and mental health. Failure to gain weight would warrant immediate investigation; gain of excess weight might indicate emotional or social stress. Boys surpass girls in weight at about age nine (Tanner, 1970). Between ages six and twelve, height increases five or six percent of the total height each year. The average height of children in this age group is increasing each decade. Girls experience a height growth-spurt prior to menarche, and boys, at the time of genital development. Children are likely to attain roughly the same height as their same sex parent.

Muscles show a rapid increase at about age five or six. Their usefulness expands as they grow in length and breadth. Exercise and general health status affect muscle development. Increasing muscle strength impels children to activity. The heart muscle continues to grow until about age twenty. The bones of the child in this period increase in size and become more calcified. Children's feet grow quite rapidly, and ill-fitting shoes at this age can damage feet for life. Walking barefooted on soft surfaces and ballet dancing can aid in foot development. Bad posture at this age can lead to other physical problems.

The amount of fatty tissue in the body does not change markedly in middle childhood unless eating habits change. Girls have more fat and it is distributed differently, resulting in softer contours. Overfeeding in infancy can cause excess fatty tissue at later ages. The nervous system changes not in quantitative terms as much as in qualitative ones: myelination is completed between ages six and eight, and by age eight the brain reaches its mature size. Intercerebral association tracts continue to develop, and gray matter continues to build.

The child's skin becomes less delicate, and the hair darkens during middle childhood. The digestive system shows fewer upsets and retains food for longer periods of time. Bladder capacity will vary widely among children, but boys' bladders having a smaller capacity than girls'. Hearing acuity increases to age-thirteen, and ear infections are reduced as a result of structural changes in the Eustachian tube. After the eyeball reaches its full weight at around age seven, 20/20 vision is possible. Binocular vision develops during this period (Breckenridge & Vincent, 1965).

In the latter portion of middle childhood, the reproductive systems begin to change, girls maturing before boys the same age. Puberty typically begins for girls between eight and fourteen and for boys between ten and fourteen and one-half (Tanner, 1970). The age when puberty occurs is related to genetics, but can be delayed by malnutrition. Reproductive maturation is occurring at earlier ages today than it did a century ago.

For girls the first sign of puberty is breast buds and pubic hair. The uterus and vagina mature simultaneously with breasts. The first menstrual period generally occurs between ages ten and sixteen. In boys the onset of puberty is the accelerated growth of the testes and scrotum. Pubic hair may accompany or follow these changes. About a year later, growth of the penis and a height growth-spurt typically occur. The first ejaculation occurs about a year after penis growth. Axillary and facial hair and voice changes are later changes.

Children's motor abilities are a function of their genetic make-up and the encouragement and opportunity provided by the environment to develop their skills. Whereas training can aid skill development, maturation of the structures must precede training for practice to have lasting effects. Premature training may result in long-term damage, a diminishing of self-concept, for example. Motor skill components include strength, often measured in hand grip; flexibility, which is a major contributor to motor ability; impulsion; speed; and precision (Guilford, 1958). There are varying differences in these components with respect to the sexes, some owing to body differences and others possibly the result of cultural conditioning. Simple correlations between classroom learning, intelligence, and physical fitness show little or no relationship between academic achievement and physical fitness (Cratty, 1970).

Motor learning moves from simple to complex, gross to refined, large to small. During middle childhood, motor performance is largely unaffected by physique, except in extremes. Motor performance is moderately related to skeletal age and negatively related to subcutaneous fat in the accomplishment of certain tasks. Exercise promotes the protein-building power of the body, and for physical fitness to be attained, muscles must be required to perform at a higher level than normal activity demands. Such activities have to be planned because children do not normally encounter situations which provide such physiological overloads (Corbin, 1969).

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- Guilford, J. P. Can creativity be developed? Ed. Digest, December 1958, pp. 49-51.
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SUGGESTED READINGS

Brisbane, H. E., & Riker, A. P. The developing child. Peoria: Charles A. Bennett, 1971.

Excellent chapter on physical development with case studies.

Draper, M. W., & Draper, H. E. Caring for children. Peoria: Charles A. Bennett, 1979.

Stages and ages of development from conception through adolescence.

Westlake, H. G., & Westbrook, M. A. Children: A study in individual behavior. Lexington: Ginn, 1977.

Part Four recognizes that each type of development is on-going and not tied to any one age.

LEARNING ACTIVITIES

1. Title: Motor Skills Testing

Description: Give simple skills tests to several children of increasing ages. Develop a graph to illustrate the specific components of motor ability.

Materials and Arrangements Needed: Graph paper, arrangements to test the children

2. Title: Chart

Description: Develop a poster or chart to show typical differences in boys and girls with respect to motor skills.

Materials Needed: Poster paper, reference books

3. Title: Oral Reports

Description: Select a person who accomplished an outstanding physical achievement or a person who overcame a physical handicap. Try to find out how their physical development affected their lives during the school years.

Materials Needed: Reference books

4. Title: Interview

Description: Interview a parent with several children. Find out in what ways the children were alike and unique in their physical development and motor ability. Did the presence of older children seem to help younger children learn faster? Use as a basis for class discussion.

Materials Needed: None

Reference: Adapted from Solsrud, L. O. Understanding child development. Tony, Wisconsin: Homemaking Research Laboratories, 1978.

5. Title: Guest Speaker

Description: Invite a physical education teacher to speak on the motor abilities and physical development of school-aged children. The class might want to know the effects of early strenuous training. The teacher might also explain the relationship between self-concept and motor abilities.

Materials Needed: Letter confirming time and date, thank you letter

6. VOCABULARY

1. Motor ability or skills--Abilities, skills, or actions involving muscle movement.
2. Binocular vision--Both eyes working together to increase ability to see.

INSTRUCTIONAL AID

Title: Display

Description: Borrow equipment or toys from a toy store that would be appropriate for children six through twelve. Show these to students. Ask them to decide what age child would get maximum use of each toy and how the child would benefit physically from the toy.

Materials Needed: Toys

EVALUATION

1. Title: Pretest

Description: Complete these true-false statements to determine the knowledge students have. Write "true" in the blanks of the true statements and "false" in the blanks of the untrue statements.

- True 1. For optimum physical fitness, a child needs exercise activities beyond the normal activity of most American children.
- False 2. There is a strong relationship between academic achievement and physical fitness; the smarter child will be the more physically fit.
- False 3. Boys usually reach puberty at an earlier age than girls.
- True 4. As the digestive system matures, the school-aged child has fewer stomachaches than a younger child.

False 5. Hearing and vision do not change during the middle childhood years.

True 6. Girls have more fat than boys during middle childhood.

True 7. The heart muscle continues to grow until about age twenty.

True 8. The brain, skull, eyes, and ears develop faster than other body parts during middle childhood.

True 9. Shedding teeth and the eruption of permanent teeth happen during middle childhood.

False 10. A child's normal growth pattern is affected only by sex, birth weight, and body build.

Materials Needed: Copies of questions

2. Title: Tick-Talk

Description: Students have a set amount of time to tell their own experiences of when their self-concepts were either raised or lowered by their own motor abilities. Have them tell how they overcame a low estimation and if they were unsuccessful, what they could do now to change it. Involve the entire class. Give suggestions, if a solution is needed. This activity can be used to evaluate comprehension of the day's lesson.

Materials Needed: Clock

3. Title: Hot Potato Game

Description: Have everyone sit in a circle. (Teacher included) The teacher closes his/her eyes, and the students throw the bean bag around the circle. (There does not have to be any particular order.) Whenever the teacher opens his/her eyes, whoever has the bean bag has to answer the question. Review questions are listed below.

1. Name five skills that are maturing as the six year old develops physical skills?

- | | | |
|--------------|-----------------|--------------------|
| 1. strength | 4. coordination | 7. sense of rhythm |
| 2. speed | 5. control | |
| 3. endurance | 6. accuracy | |

2. Active play is prime characteristic of what age child?

Six- to eight-year old.

3. What is one of the most important factors affecting the child's motor development?

The way a parent feels about body movement.

4. How can parents help children develop their motor skills? List four.

1. *encouraging*
2. *appreciating*
3. *teaching*
4. *giving opportunities*

5. Name four kinds of active play.

1. *running*
2. *jumping*
3. *swimming*
4. *bicycling*

6. Girls begin to have rapid muscular growth at what age?

Eleven; boys, twelve.

7. Do the changes in locomotor skills, agility, coordination, and physical strength have anything to do with the interest of boys and girls?

Yes.

8. In what kinds of skills can girls surpass boys at age twelve?

Tasks involving rhythmic movements, such as hopscotch and rope skipping.

9. Give three reasons why children do not have as much physical exercise as in the past.

1. *no yard space*
2. *TV*
3. *paved streets and traffic*

10. What three attitudes are most important for a child to acquire?

1. *that he is important*
2. *is a loving and loved person*
3. *is successful*

11. An individual's conception of his or her motor ability appears to be closely related to what?

His self-concept.

12. Name three conditions most often found in homes where bright children come from.

1. *better nutrition*
2. *better learning opportunities*
3. *more chances for beneficial physical exercise*

Materials Needed: Bean bag and list of review questions

Source: Remy, C. "Motivational Teaching Aids" In-Service Teachers' Workshop, Louisiana Tech University, Spring, 1980.

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Food and Health

GENERALIZATIONS

1. We are what we eat.
2. Malnutrition can result from poor food habits, poor health practices, physical defects, and diseases.
3. Malnutrition can cause not only specific diseases but also obesity, lethargy, apathy, hyperactivity, tooth decay, poor posture, and skinny bodies.
4. Food patterns and practices are learned primarily in the home; they can be modified through education and modeling.
5. Rest, sleep, nutrition, and exercise contribute to good health; middle childhood is typically a healthful period of life.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Defend with facts the statement "We are what we eat."
2. Tell the causes and result of malnutrition.
3. Explain how eating habits are acquired and how they can be changed.
4. Tell why middle childhood is usually a healthful period and what factors contribute to good health.

OUTLINE

I. Food Is the Fuel To Run the Body

A. Building and Repair

1. Protein
2. Minerals
3. Water
4. Vitamins

B. Energy

1. Fats
2. Carbohydrates
3. Protein

C. Regulation

1. Minerals
2. Water
3. Vitamins
4. Protein
5. Fats

II. Food Practices Affecting Nutrition

A. Hurried Meals

1. Produce stress
2. Produce pressure

B. Empty Calorie Snacks

C. Fad Diets

III. Health Practices Affecting Nutrition

A. Too Little Sleep

B. Lack of Outdoor Play

C. Overexercise

IV. Attitudes Toward Food

A. Begin in Infancy

B. Influenced by Peers

C. Can Be Changed through Education

V. Signs of Good Health

A. Appearance

B. Actions

C. Emotions

VI. Factors in Good Health

A. Nutrition

B. Rest and Sleep

C. Exercise

D. Emotional Needs Being Met

REVIEW OF SELECTED LITERATURE

It has been suggested that it takes two generations of good nutrition to produce healthy children since the maternal nutrition contributes so much to the formation of the unborn child and because the mother typically patterns the child's eating habits in early life (Landreth, 1967). By school age the children have been exposed to most foods of their culture and have formed feelings about them which may remain into adulthood. Children model after their parents and older siblings. During the ages six to twelve years, their food preferences are likely to be influenced by those of their peers. Advertising is apt to play a role in the introduction of empty calorie foods into their diets and in the desire for these foods as snacks, particularly. Many children in America are well-fed, but poorly nourished; good foods are available to them at home and in the school, but they are not willing to eat these foods for various reasons. These reasons include preconceived notions, fear of the unknown, poor experiences in trying new foods, peer pressure, lack of appetite as a result of snacking, and lack of encouragement or models.

By age six, children can learn to assess the adequacy of their diets by such simple patterns as the Basic Four. They can learn good sources of various nutrients and can be taught what foods are generally harmful or non-nutritious. Children do not innately know what foods are good, or what their bodies need to be well-nourished.

Although most American children do not suffer from such nutrition-based diseases as scurvy, or night blindness, too many experience obesity, hyperactivity, apathy, anemia and tooth decay owing to lack of diet adequacy. Obesity often develops around age six, and fat children usually become fat adults. Diet care, psychological support, and increased exercise are methods of childhood obesity control. Winick (1975) reports that the genetic factor in obesity causes a child with one obese parent to have a forty percent chance of obesity; the probability rises to eighty percent with two obese parents and falls to seven percent if neither parent is obese.

Prevention of poor food habits in children can be aided by pleasant experiences with food such as serving attractive food, allowing children to help plan menus and prepare food, giving them freedom to combine and eat foods in their own ways, and making servings small. Adequate sleep and exercise are necessary for the establishment of proper eating habits. Parents can also set good examples of food selection and make mealtime free from stress and pressure. Positive reinforcement for proper consumption can also help the child's attitudes toward food.

The general health of a child is revealed in his/her appearance and behavior patterns. Hurlock (1972) characterized the healthy child as having pink mucous membranes, especially the lips; bright, responsive eyes; happy expression; rounded limbs caused by sufficient subcutaneous fat; well-formed muscles with good tone; a well-balanced stance and erect posture; almost straight limb muscles; a straight spine; shoulder girdles which do not droop; well-formed arches in the feet; movements that are characterized by vigor and elasticity and poise. Children who are in good health are

generally energetic, alert, and anxious to be going and doing. They prefer active play over sedentary play, and they are generally happy and easy to live with. On the other hand, the unhealthy child, according to Hurlock (1972), is either under or overweight, soft or flabby, and is characterized by poor posture, rounded shoulders, bowed legs, and carious teeth. Unhealthy children may be shorter than their family background would suggest, and they will tend to prefer watching TV to playing. These children may also be in poor control of their emotions, reduced to tears easily, or prone to lash out aggressively at the slightest provocation.

During the middle years children need sleep and rest to allow for the body to grow and repair. There is no set amount of sleep needed, but adequacy can be assessed by the readiness to arise, activity in play, cheerfulness, and enthusiasm. School-aged children may require less rest than pre-schoolers or adolescents because they are not growing at such rapid rates at this time.

Normally, middle childhood is a healthful time of life. Healthy conditions tend to be related to the socio-economic status of the family with regard to diet and health care attitudes and availability. The school personnel provide another watchful eye on the child's health and often give referral service to aid children whose families are not aware of or sensitive to health deficiencies and needs.

REFERENCES

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- Landreth, C. Early childhood: Behavior and learning. New York: Knorp, 1967.
- Winick, M. Introduction to childhood obesity. New York: Wiley, 1975.

LEARNING ACTIVITIES

1. Title: Game

Description: Make a set of cards that have food illustrations on them. Deal each player seven cards. Players "fish" from the center pile and discard one card at each turn. When a player has a card representing each of the Basic 4 Food-Groups, he/she has a "set." The player places each set face down on the table. Play continues until all cards are used. The player with the most sets wins.

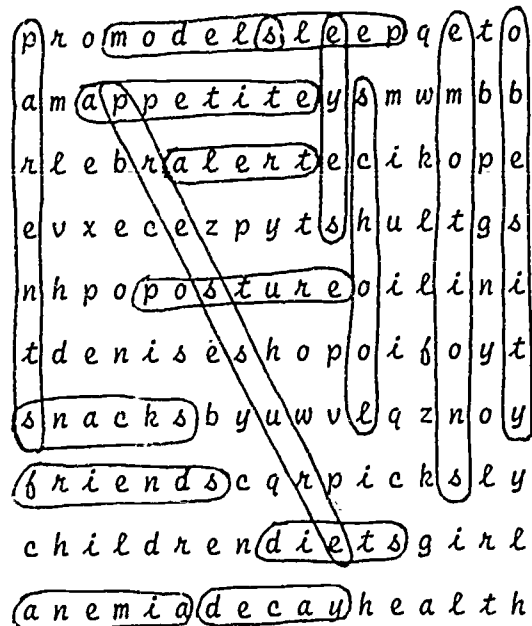
Materials Needed: Cards made from index cards and food pictures laminated together

Reference: Adapted from Bulletin Boards and Games, Forecast for Home Economics, December 1978, p. 20.

2. Title: Word Search

Description: Work the "Nutrition and Health Word Search Puzzle" (Student Handout #27).

Key: Word Search



1. parents
- friends
2. snacks
3. models
- pressure
- appetite
4. diets
5. obesity
- anemia
- decay
6. alert
7. sleep
8. emotions
9. eyes
- posture
10. school

Materials Needed: Copies of puzzle

3. Title: Meal Planning

Description: Using food models, plan nutritious meals for children that are attractive and enjoyable to school-aged children.

Materials Needed: Food models

Source: An excellent set of food models can be obtained from the Dairy and Food Nutrition Council of the Southeast, Inc., Deep South Division, 2121 North Causeway Boulevard, Suite, 159, Metairie, La. The cost is about \$6.00.

4. Title: Presentation

Description: Visit a scout meeting and teach the scouts about good nutrition and the Daily Food Guide. Before planning the presentation, find out what the badge requirements are. Plan some activities that will help the scouts earn their badges. They might enjoy the Go-Fish game, a What's Missing game (use food models), and some simple nutritious snacks.

Materials Needed: Permission to visit troop, materials for selected activities

5. Title: Poster

Description: Make creative, colorful posters that teach good food selection. A good source of ideas for posters is Spring forward with nutrition know-how, by L. R. Shoaf and A. H. Westergaard. Available from Louisiana Tech Bookstore for a cost of \$2.50. Hang posters in the cafeterias of elementary schools.

Materials Needed: Poster paper, markers

6. VOCABULARY

1. Nutrition--The science that studies the relationship between human bodies and health.
2. Malnutrition--Faulty or inadequate food selection.
3. Obesity--Extreme overweight.
4. Hyperactivity--Excessively active; extreme nervousness.

EVALUATION

1. Title: Writing Assignment

Description: Select one of the following topics and write an original story about a child in the five to twelve age group.

- (1) "You are what you eat."
- (2) Causes and results of malnutrition.
- (3) Eating habits are acquired and changed.
- (4) A healthy middle childhood person.

Materials Needed: Paper, pen

2. Title: Advertising Evaluation

Description: Watch television one Saturday morning. Keep a record of food advertisements. Answer the following questions:

- (1) How many food ads were seen in a three-hour time span?
- (2) What types of foods were advertised?
- (3) How would you evaluate the nutritive value of the products?
- (4) What techniques did the commercial use to get children's attention?

The class may be divided into groups of three so each student would have to watch only one hour, and group members could then combine results.

Materials Needed: Televisions in homes

3. Title: Advertising Presentation

Description: After completing the above activity, create television commercials for nutritious foods (such as yogurt, liver, or whole grain bread). Videotape the commercials, show to school-aged children for their reactions, and then serve the food and check the acceptability of the foods.

Materials Needed: Videotaping equipment, various props for commercials and foods

School-Aged Child: Nutrition and Health Word Search Puzzle
Student Handout #27

Words related to health and nutrition of school-aged children are listed in this word search puzzle. The words can be read horizontal, vertically, or diagonally. Use the words to fill in the blanks in the statements below.

P R O M O D E L S L E E P Q E T O
A M A P P E T I T E Y S M W M B B
R L E B R A L E R T E C I K O P E
E V X E C E Z P Y T S H U L T G S
N H P O P O S T U R E O I L I N I
T D E N I S E S H O P O I F O Y T
S N A C K S B Y U W V L Q Z N O Y
F R I E N D S C Q R P I C K S L Y
C H I L D R E N D I E T S G I R L
A N E M I A D E C A Y H E A L T H

1. Children learn food preferences from _____, older brothers and sisters, and _____.
2. Advertising is likely to influence a child's food preferences, especially for _____.
3. There are many reasons why children are not willing to eat the good foods that are available to them. These reasons include:
 - A. lack of _____.
 - B. fear of the unfamiliar.
 - C. peer _____.
 - D. lack of _____ as a result of snacking.
4. During the middle childhood, young people can understand how to use the Daily Food Guide in evaluation of their _____.
5. Many American children suffer from nutrition-related problems such as _____, hyperactivity, apathy, _____, and tooth _____.

Student Handout #27-Continued

6. Children who are in good health are generally energetic and _____.
7. School-aged children may require less _____ than pre-schoolers because they are not growing as rapidly.
8. Unhealthy children may be in poor control of their _____.
9. Healthy children usually have bright _____, erect _____, and a happy expression.
10. _____ personnel often give referral service to aid children whose families are not aware of health deficiencies.

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Illness and Injury

GENERALIZATIONS

1. The common illnesses during middle childhood are respiratory and gastrointestinal in nature; communicable diseases are less common than in early childhood.
2. Children by this age can be taught self-care for prevention of much illness and injury; some children are accident prone.
3. The leading causes of injury are motor vehicle accidents, drowning, and fire.
4. The leading causes of death between ages five and fourteen are accidents and cancer.
5. Many children have disabilities that affect their functioning; orthopedic, speech, hearing, and visual defects are the most common.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Characterize the illnesses, injuries, and disabilities common among middle childhood people.
2. Explain what accident-proneness is and tell some possible reasons for it.
3. Suggest some ways to reduce illness, injury, and deaths among children ages six through twelve.

OUTLINE

- I. Illness
 - A. Types
 - B. Prevention
- II. Accidents
 - A. Accident-proneness Factors
 - B. Types

C. Prevention

1. Safety standards
2. Safety education

REVIEW OF SELECTED LITERATURE

Although generally a healthier age than early childhood, middle childhood is a time when children's growth and development is affected negatively by illnesses, accidents, and health conditions which prevent full realization of potential. The most frequent types of illness are respiratory and gastrointestinal in nature, and the incidence of communicable disease is decreased. Through immunization, avoidance of such once-dreaded diseases as whooping cough, polio, mumps, rubella and diphtheria can be achieved. However, over five million children in America are currently unimmunized against these threats to their health (Status of Children, 1975). Over two million children under age fourteen are living with disabilities of permanent or indefinite duration; orthopedic defects are the most common, followed by speech, hearing, and visual defects. Such chronic conditions as diabetes, asthma, infected tonsils, and allergies plague many other children, affecting both physical growth and emotional well-being (Breckinridge & Vincent, 1965).

During middle childhood, children can learn to care for themselves in ways that reduce the incidence of disease and injury as they understand more about how the body functions, the role of nutrition and rest, and how diseases are transmitted and treated (Smart & Smart, 1978).

Other children live with inherited disorders, such as sickle cell anemia and hyperactivity, conditions which prevent children's functioning fully in an expanding environment. The attitudes of parents toward disability as well as illness and injury affect the child's ability to adjust to his/her handicap. Children need to be encouraged to do as much for themselves as possible; such parental encouragement instills a feeling of confidence rather than dependence or pity (Wunderlich, 1970).

The role of environmental management relates primarily to the incidence of injury to children. Tragic numbers of children are injured or killed annually as a result of poisonings or explosions. These accidents are a result of around-the-home experimenting or mistaking such household products as bleach, iodine, kerosene, and medicines for harmless substances. In 1975, motor vehicles, followed by drowning, fire, and burns, were the leading cause of death in this age group (Status of Children, 1975). Many of these injuries could be prevented through "child-proofing" homes and communities and through careful adult supervision of children's activities. Although cognitively able to prevent some accidents, middle childhood children often lack judgment or foresight to do so, or they are influenced by peers to take chances beyond their ability to resist.

Some children have been found to be illness or accident-prone. They seem to have more than their fair share of illness or injury and

are sicker when illness strikes. Among the factors contributing to such a proneness are repeated frustration, hostility toward adult authority, broken homes, authoritarian discipline methods, poor social adjustment, and being a latter-born child (Hurlock, 1972). Research indicates that individual maladjustment is an important variable in accident liability and that family pathology is related to personal pathology.

Injuries sustained in connection with toys account for less than five percent of home injuries in recent years. Bicycles, roller skates, and sleds were involved in the majority of toy-connected accidents. Federal toy safety standards help to reduce the number of toy-related injuries; under the Federal Hazardous Substances Act, electrical toys must carry age recommendations. The Child Protection Act bans children's articles containing hazardous substances. The Child Protection and Toy Safety Act authorizes the Food and Drug Administration to remove from the market any article intended for use by children that presents electrical, mechanical or thermal hazards (Williams & Stith, 1980).

Safety education for children begins in the home and continues in the school and community. Rules which children can understand and follow form the basis for safety. Models of safety reinforce these rules. Parents must not overprotect and yet not overestimate their children's abilities to live safely (Ames, 1979).

Middle childhood people take extraordinary pride in and experience high anxiety about the welfare of their bodies. When ill or injured, they fear loss of friends because of confinement; they greatly fear anesthesia; they feel anger toward those who are not ill, particularly siblings; and they need constant reassurance about the treatment they receive. The near-constant companionship of a parent seems to aid greatly in their emotional well-being, as well as in their physical recovery (Williams & Stith, 1980). The body's ability to canalize, or return to its normal growth pattern following disease or trauma goes into operation as optimum conditions return and allows growth and development to catch up, if the interruption has not been too prolonged.

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- Hurlock, E. Child development. New York: McGraw-Hill, 1972.
- Smart, M. S., & Smart, R. C. School age children: Development and relationships. New York: Macmillan, 1978.
- Status of children. Washington, D.C.: George Washington University Social Research Group, 1975.

Williams, J., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan, 1980.

Wunderlich, R. C. Kids, brains and learning. St. Petersburg, Florida: Reads, Inc., 1970.

SUGGESTED READINGS

Ames, L. B. Child care and development. New York: J. B. Lippincott, 1979.

Good chapter on routine health care, health and safety habits, checkups, and immunizations.

Brisbane, H. E., & Riker, A. P. The developing child. Peoria: Charles A. Bennett, 1971.

Excellent chapter on physical development with case studies.

Draper, M. W., & Draper, H. E. Caring for children. Peoria: Charles A. Bennett, 1979.

Stages and ages of development from conception through adolescence.

LEARNING ACTIVITIES

1. Title: Research Assignment

Description: Research information on one of the following chronic illnesses that affect middle childhood people. Suggested topics are: Sickle Cell Anemia, Asthma, Epilepsy, Hyperkinesis, Congenital Heart Disease, Diabetes, Ulcers, Cleft Palate.

Materials Needed: Library books

2. Title: Field Trip

Description: Visit the public library and a book store. Find books that could be read by a school-aged child. Select ones that would help the child understand more about doctors or dentists, hospitals, first aid, or certain health practices. Try to find books that might help change attitudes toward wearing glasses, hearing aids, or braces. Compile a bibliography of available books and give copies to elementary teachers. Give credit to the home economics class who completed the project. Raise money to purchase copies of selected books for elementary classrooms.

Materials and Arrangements Needed: Permission to visit, transportation, ditto master, paper

3. Title: Guest Speaker

Description: Invite a representative from the Parish Health Unit to speak about childhood illness, symptoms, effects, cures, vaccinations, and prevention.

Materials Needed: Letter confirming date, time, and topic, and thank you letter

4. Title: Newspaper Clippings

Description: Bring newspaper articles or magazine stories on childhood accidents to class. Discuss each article and determine the best methods of preventing such accidents.

Materials Needed: Articles brought by students

5. VOCABULARY

1. Communicable diseases--Illnesses that can be transmitted relatively easily from one person to another.
2. Accident-prone--Children who seem to have more than their share of accidents or illnesses.
3. Chronic diseases--Illnesses that last a long time.
4. Acute diseases--A severe condition that appears quickly.
5. Immunization--Taking shots that give a person the ability to resist certain diseases.
6. Orthopedic defects--Those defects pertaining to deformities affecting bones, muscles, and joints.

INSTRUCTIONAL AID

Title: Transparency

Description: Make a transparency entitled "Safety First" (Figure #63). List activities to make the home a safer place. Examples: Stop (1) storing knives in drawer with other utensils, (2) saving plastic bags from cleaners, and (3) storing cleaning supplies under sink. Write these ideas on transparency.

Materials Needed: Transparency, grease pencil, overhead projector

Reference: Adapted from Clewer, L., & Monroe, S. Bulletin Board Book I, Seasons, Holidays, and Special Projects. Carson, California: Educational Insights, 1976.

EVALUATION

Title: Writing Assignment

Description: Select one of the following and write a newspaper article on the chosen topic:

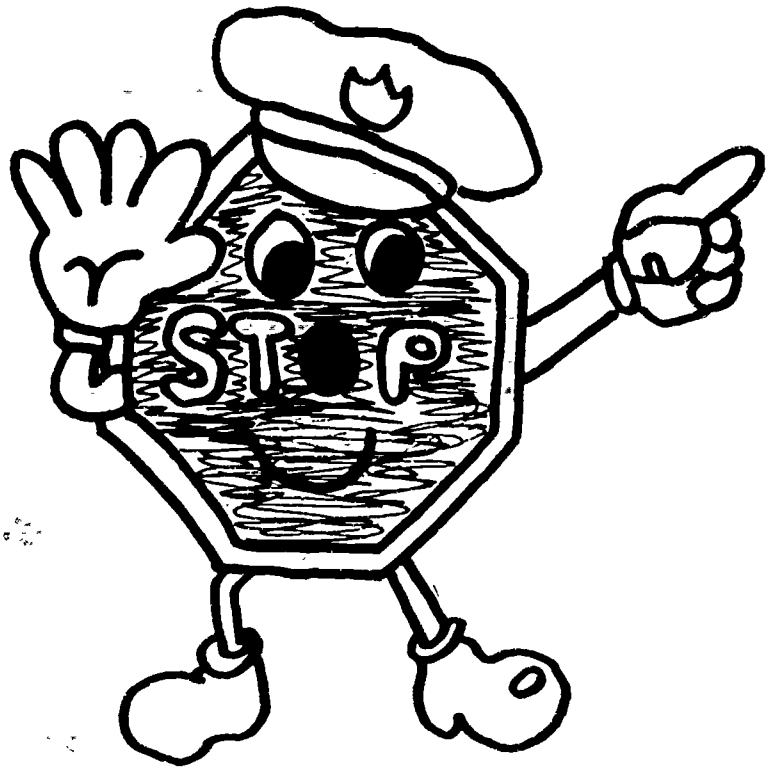
1. Illnesses, injuries, and disabilities common among middle childhood people.
2. Accident-proneness and some possible reasons for it.
3. Ways to reduce the illness, injury, and deaths among children ages six through twelve.

Materials Needed: Paper, pen

485

431

SAFETY FIRST



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

432

UNIT: Growth and Development of the School-Aged Child

CONCEPT: The Society of Childhood: Family and Peer Influences

GENERALIZATIONS

1. Middle childhood people are idea and action people, and as such, they form a unique society with characteristics and activities found during no other time of life.
2. During middle childhood the influence of and loyalty to family declines.
3. The peer group assumes increasing influence and status during middle childhood.
4. Some functions formerly served by family begin to be assumed by the middle childhood peer group: companionship, testing ground for behavior, knowledge transmission, teaching of rules and consequences, escape from adult supervision.
5. Sibling rivalry is a natural part of family life, but can be minimized through skillful guidance.
6. Parent-child relationships are more challenging between ages six and twelve as children begin to compare their parents with others in their expanding world and as peers gain in influence and time demands.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Enumerate some aspects of the childhood society which are unique and explain the function they serve in basic needs fulfillment.
2. Characterize a child's typical view of adults.
3. Define "peer group" and list some of its main functions to its members.
4. Define "sibling rivalry" and tell some causes of it and methods of minimizing it in the home.
5. Discuss how parent-child relationships are related to home climate, parents' relationship to one another, guidance style in the home, size and composition of the family, and family management of resources.

OUTLINE

- I. The Society of Childhood

- A. Unique Characteristics
- B. Changing Role of the Family
 - 1. Sibling Rivalry
 - a. Manifestations (bickering, selfishness, destructiveness, aggression, bedwetting, nail-biting, etc.)
 - b. Causes
 - c. Ways to minimize
 - 2. Parent-child relationships
- C. The Peer Group
 - 1. Functions
 - a. Companionship: Someone to be and do with
 - b. Testing ground for behavior
 - c. Teacher of rules and consequences
 - d. Transmission of knowledge: misinformation and truth

REVIEW OF SELECTED LITERATURE

Middle childhood is a unique period of life, a time when children think, act, feel, and choose in ways virtually unknown to any other age or stage in the lifespan. It is only in this major period that an individual can be a Cub Scout or a Brownie, that one can lose teeth with the assurance they will grow back, that one hates the opposite sex so much there is a refusal even to hold hands in a circle. This is the time when one buys cereal according to what's pictured on the package rather than what's inside, when Hank Aaron, The Fonz, Fat Albert and Wonder Woman are idolized, and when one stuffs the pockets with Star Wars cards, bits of string, rocks, bullet casings, or a purse with hairclips, doll clothes, pictures of movie stars, and chewing-gum wrappers folded into geometric shapes. Only middle childhood people send cryptic messages written in lemon juice, become blood brothers by cutting their arms and placing the cuts together, speak Pig Latin, give Indian wrist burns, and try to kiss their own elbows to change their own sex (Williams & Stith, 1980).

During middle childhood, the child does not view the family as idealistically as during the preschool years. Overt family loyalty is lost, and though the family is still vital to a child's functioning, his/her willingness to admit that need diminishes. Children, during this age, criticize their parents and their siblings a lot, and cite arguing, money, and divorces as being among the biggest family problems (McInnis, 1972). They typically see fathers more punitive and less fun than mothers. They realize that adults make mistakes. They often charge that adults are unfair and that they do not understand children and do not listen to children. Children in this stage of life desire many things from their families such as to have their opinions respected, to receive answers to their questions, to be listened to, and to receive objective, fair and patient treatment (Parkhurst, 1951). Children who perceive that they are

accepted by their parents tend to be cooperative, friendly, honest emotionally stable, enthusiastic and cheerful, whereas those who feel rejected tend to be overactive, quarrelsome, and emotionally unstable. This instability may breed a resentment toward authority and an inclination to steal (Baurind, 1971).

The peer group offers children a chance to draw together and gain strength from each other as they pull away from adults and begin to practice independence. This subculture has its own traditions, games, values, loyalties, and rules separate from those of adult society. These guidelines are handed down from one generation of children to the next. The secret society or club is a method children use to keep their thoughts and "doings" from adults. The peer group helps children avoid boredom and loneliness. It organizes projects and provides a place to exchange treasures, jokes and riddles, boastful tales of adventure and accomplishment. It teaches songs, chants, games and superstitions no adult would ever think to transmit! Within the clique of very close friends, the child feels accepted and secure, willing to share innermost thoughts and hopes and fears. Around age eight to nine, the sex cleavage which divides boys and girls and makes them avowed enemies provides a reinforcement of the sex role differences they have been taught during early childhood. This emphasis on sex distinction provides a time to practice boyness and girlness, and allows the child to discover the related advantages and perils. Treatment by peers provides children with experience of in-ness and out-ness, belongingness and exclusion. Good friends are very important to children, but so are enemies against whom to plot (Williams & Stith, 1980).

The peer group provides a place to learn facts as well as feelings. Many bits of truth are here gleaned; many misconceptions on topics ranging from sex to physics are also traded. It is in the peer group that courage is learned, real courage--to do something parents have taught is wrong. Children who have the power of the peer group to carry them will often break family rules. But the peer group has its own codes of behavior, which are many times stringent and tough. And a strict code of penalty, with isolation a common consequence, is normal. The group process is taught in the peer group, not always accompanied with true justice, but taught nonetheless. Fortunately, children this age forgive and forget easily, and the ostracized today may be the group leader the next week.

Acceptance in the peer group will be contingent upon the child's early experiences with his/her family, the guidance style under which he/she lives, his/her self-concept; opportunities to be with peers and the family's reactions to peers; his/her ordinal position; and his/her own personality traits. Acceptance may be hindered if the child has a physical or personality trait that is feared or disliked. When judging the attractiveness of their peers, children were found to be most often influenced by hair, eyes, teeth, and mouth (Kleck, Richardson, & Ronald, 1974). Such features as posture and head and body size were also important cues. According to Gronlund (1959), above-average intelligence and athletic skills attract females.

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- McInnis, J. Family perception as expressed by youth ages 11-18. Ph.D. Thesis, Florida State University, 1972.
- Parkhurst, H. Exploring the child's world. New York: Appleton-Century-Crofts, 1961.
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LEARNING ACTIVITIES

1. Title: Survey

Description: Survey a class of fifth or sixth graders to find out traits they like in friends and personality traits they dislike in others. Ask for a description of their best friends.

Materials Needed: Questionnaire, permission to visit a classroom

Reference: Adapted from Williams, J. W., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan, 1980, pp. 228-229.

2. Title: Super Sleuth Scavenger Search

Description: Divide class into pairs. Each pair receives the "Super Sleuth Scavenger Hunt" (Student Handout #28) list of middle childhood experiences. The object is to find children, ages six to twelve, who are involved in these activities. Have the child sign his/her name on the list. The pair that comes to class the next day with the most signatures wins. One child may sign the same list up to three times.

Materials Needed: Copies of the list of childhood experiences

3. Title: Slide Presentation

Description: In the review of selected literature, middle childhood is described as a unique time in life. Develop a slide presentation depicting the "specialness" of this time in life. Tape a script to accompany slides.

Materials Needed: Camera, film, projector, tape recorder

4. Title: Guest Speaker

Description: Invite an elementary school teacher to speak on middle childhood. Ask the teacher to describe some favorite songs, jokes, and games of this age group, as well as their typical physical and personality characteristics.

Materials Needed: Letter confirming time and date, thank you letter

5. Title: Bulletin Board

Description: On an index card, write a paragraph telling of activities remembered from middle childhood. Use cards from the entire class and photographs of students when they were in elementary school to construct a bulletin board.

Materials Needed: Index cards, pictures of students, backing for bulletin board

6. Title: Research Assignment

Description: In popular books, such as Huckleberry Finn, Tom Sawyer, and Little House series, locate examples of peer pressure on school-aged children.

Materials Needed: Library books

7. Title: Panel Discussion

Description: Invite parents of school-aged children or students who have school-aged siblings to talk to the class about living at home with children of this age.

Materials Needed: Letters confirming time and date, thank you letters

8. VOCABULARY

1. Sibling Rivalry--Competition or conflict between brothers and sisters.
2. Misconception--Misunderstanding; an error in thinking.
3. Ostracize--To exclude from a group.

INSTRUCTIONAL AID

Title: Transparency

Description: Make a transparency entitled "Everybody has to be Special" (Figure #64).

Materials Needed: Transparency, overhead projector

EVALUATION

Title: Written Quiz

Description: The following test questions can be used to evaluate student knowledge.

1. Define these terms:
 - A. Sibling Rivalry--*Competition or conflict between brothers and sisters.*
 - B. Peer Group--*A child's friends of about his/her own age.*
2. List four causes of sibling rivalry. Suggest methods of minimizing this rivalry.
 1. *lack of attention*
 2. *fear of being unloved*
 3. *low self-esteem*
 4. *pressures*

To Minimize:

 1. *build self-confidence*
 2. *provide individual time with parents*
 3. *build respect for siblings' abilities*
 4. *calm discussion of differences*
 5. *show love for all children*
3. Describe school-aged child's typical view of adults.

The child is less interested in pleasing adults, will criticize parents, and realizes that adults make mistakes.
4. List four main functions of the peer group.
 1. *companionship*
 2. *testing ground for behavior*
 3. *teacher of rules and consequences*
 4. *transmission of knowledge*

Materials Needed: Copies of quiz

Figure #64

EVERYBODY HAS TO



SPECIAL

SO SOMETIMES BROTHERS AND SISTERS
DON'T GET ALONG

HOW CAN SIBLING RIVALRY BE REDUCED?

- 1) BUILD INDIVIDUAL SELF-CONFIDENCE
- 2) PROVIDE INDIVIDUAL TIME WITH PARENTS
- 3) BUILD RESPECT FOR SIBLINGS' ABILITIES
- 4) DISCUSS DIFFERENCES CALMLY
- 5) SHOW LOTS OF LOVE

Super Sleuth Scavenger Hunt
Student Handout #28

Fill in the blank with name of the specific club activity, etc.
Signatures must be from children ages six to twelve.

<u>Activity</u>	<u>Signature</u>
1. Member of a formal club at school _____	_____
2. Member of an informal, or "secret club" _____	_____
3. Member of a Sunday school class or children's religious group _____	_____
4. Member of a scout troupe _____	_____
5. Takes some type of lessons after school _____	_____
6. Has attended a summer camp _____	_____
7. Has at least one job or chore to do everyday at home _____	_____
8. Member of an athletic group (baseball, football, etc.) _____	_____
9. Watched more than one hour of television within the last twenty-four hours _____	_____
10. Has gone somewhere with a family member (other than routine travel, such as to school) _____	_____
11. Has played with a peer within the last twenty-four hours (other than at school) _____	_____
12. Has spent the night somewhere other than home within the last two weeks _____	_____

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Mass Media

GENERALIZATIONS

1. Today's children are a target of much mass media programming.
2. Children whose lives are filled with good things seldom seek harmful ones.
3. Mass media can exert considerable influence on the intellectual, emotional, and social development of children.
4. Children benefit more from help in becoming intelligent consumers of mass media than from being shielded from it.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Identify the possible impact of various media forms on intellectual, emotional, and social development of children.
2. Tell ways adults can help balance mass media consumption with other activities of interest and help to children ages six to twelve.
3. Evaluate mass media in terms of its appropriateness for middle childhood people.

OUTLINE

- I. Types of Media Targeted at Children
- II. Potential Impact of Media on Development
 - A. Reading
 - B. Listening
 - C. Watching
- III. Ways to Balance Mass Media Consumption
 - A. Variety of Other Activities with Family and Peers
 - B. Guidelines for Consumption

REVIEW OF SELECTED LITERATURE

Since the 1500's, adults have been concerned with the potential impact of mass media on youth. Children's books and stories, even fairy tales and nursery rhymes, have received periodic criticism. The mass media by and large produce what consumers buy, and many are fascinated by the bizarre, the tragic, or the heart-rending. Parents who allow children to consume at will abdicate part of their responsibility in guidance. Yet to forbid without providing suitable alternatives is also abdication. Children need to become intelligent consumers of media, able to apply family standards and make choices. Children whose lives are filled with good things seldom seek harmful things. The media consumer who exhibits neurotic or delinquent symptoms most likely held tendencies in these directions earlier in life; the media may have exaggerated them. Excessive media consumption may be due to a void in parent-child relationships, failure in peer relations, a poor self-esteem, or other unfulfilled needs (Williams & Stith, 1980).

There are a variety of mass media today that middle childhood people consume. Children's reading interests seem related to age and sex; boys are typically more interested in the how and why of things--girls, in the how and why of people. Reading is not a natural habit, but a habit which must be developed. Children's magazines in circulation number over fifty and range in type from conservation to literary works. Many children subscribe to their own magazines, and they are popular barter with peers. In regard to newspapers, children like the comics, the sports, and advice columns, as well as puzzles and quizzes. Comic reading is popular between ages seven and ten. Interest in comics typically declines as other types of reading materials are made available. Children develop an interest in reading through adults who set a good example of reading, who read to them, and who encourage them to read. Reading provides solitary entertainment, and it can be relatively inexpensive through the use of library books. Reading fosters hand-eye coordination. Not only can it introduce or expand concepts, but it can stimulate the imagination.

Listening to records, cassettes, and tapes is increasingly popular in our culture, whereas the use of the radio has declined with the advent of television. Through these kinds of media a child can be introduced to concepts prior to learning to read. Music provides for youngsters a background for studying, talking, or home chores. Record and tape players and transistors are owned by growing numbers of middle childhood people. Such electronic equipment makes it possible for the children to be a part of the action of sports or news events. Although potentially these listening devices could increase one's attending skills, most children probably attend too casually to thus benefit.

The popularity of movies has declined within the past decades owing to the advent of TV and to the increasing costs at the theatre. The decreasing number of movies produced for child viewers or with content appropriate for children has also had an influence on family movie-going. Children still delight in action, adventure movies, those about animals, pirates, cowboys, and space odysseys. Children can

remember up to seventy percent of what adults retain from movies, and if they identify with a character in the movie, the impact of the movie is even greater. They tend to identify with characters who are similar to them in age, sex, and race and whose actions are most relevant to their needs. Movies provide ideas to use in play and suggest behavior modes, and even attitudes toward certain types of people or situations (Hurlock, 1964).

Television is by far the most popular of the mass media, with ninety-eight percent of American homes owning a TV set (Ward, 1972). The average viewing time of first-grade children is three and one-half hours daily, and of sixth graders, four hours daily and six and one-half hours on Saturdays and Sundays (U.S. National Institution of Mental Health, 1972). By high school graduation, it is estimated that the average American child has spent about 22,000 hours watching TV as compared to 11,000 hours in school. By age fourteen, an American child is likely to have seen 18,000 persons killed on TV. It has been charged that one half-hour show contains more excitement, adventure, and violence than the average person experiences in a lifetime (Larrick, 1975). Although it is true that television can be a source of information, particularly in the areas of consumer awareness and consumption patterns, the advantages may be fewer than the disadvantages.

Among the negative effects TV can have on children are shorter attention spans because of recurring interruptions by ads; too little sleep owing to staying up to watch late shows; habituation to noise, strife, and confusion seen on the screen; increased hostility as a result of viewing violence in such high incidence; de-sensitivity to human suffering through over-exposure and apparently easy solutions on TV.

Families are the first line of defense against the negative impact of mass media. Establishing standards of consumption to which all family members subscribe is one method. Setting limits for media use is another. Planning alternative recreational and educational activities is an effective approach: projects, outings, discussions, work, study, and membership in community groups and clubs. Parents who exemplify good media consumption and who watch, listen, or read with children have a better handle on the challenge. Parents who discuss concepts presented in the media with children can help monitor negative impact and clarify truth and family values (Williams & Stith, 1980).

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LEARNING ACTIVITIES

1. Title: Determining Reading Levels

Description: Talk to an English teacher about how to determine the reading level of books. Then choose several popular books for middle childhood people and determine the reading levels. Check a few textbooks and a comic book, too.

Materials Needed: Books and a graph or formula for estimating reading levels

2. Title: Movie Selection

Description: Look at the entertainment section of a newspaper. Answer the following:

1. How many movies are showing?
2. Name movies you think a 6 year old would enjoy.
3. Name movies that would be suitable for an 8 year old.
4. List movies that would be appropriate for a 12 year old.
5. Are there any movies you think the entire family would enjoy?

Materials Needed: Entertainment section of a newspaper (a similar activity could be done with the television schedule for one day)

3. Title: Listing and Discussion

Description: Make a list of alternative activities your family would enjoy instead of watching television. Use as basis for class discussion.

Materials Needed: Paper, pen

4. Title: Project

Description: Select one of the following and develop it in such a manner that it could be used to teach school-aged children and/or parents about some aspect of wise use of media.

1. Develop a comic strip.
2. Write a newspaper article.
3. Draw a magazine ad or billboard.
4. Tape a brief radio or television commercial.
5. Create a song.
6. Create a design for a tee-shirt.
7. Design a bumper sticker.

Materials Needed: Paper, markers, tape, tape recorder, tee-shirt

5. Title: Field Trip

Description: Visit the parish library and look at books that appeal to school-aged children. Ask the librarian about the most popular books. Were these the same books you read as a child? What were the themes of these books? Were several of the books about the same subject? How many of the books have been adapted to other media?

Materials Needed: Letter requesting permission to visit the parish library, thank you letter, transportation, parental permission slips

6. Title: Survey

Description: Conduct a survey on the media habits of local school-aged children. Develop a survey form that will indicate answers to the following questions:

1. Which media is most important to the children?
2. How often do the children attend movies?
3. How many hours per day do they watch television?
4. What are favorite TV shows and movies?
5. Do they read comic books? Which ones?
6. How many do they read?
7. What are their favorite books?
8. Do they listen to tapes and records? Which are their favorites?
9. Do they read billboards and bumper stickers?
10. Do they own tee-shirts, hats, or other articles of clothing that express ideas or advertise a product?

Materials Needed: Survey form

7. Title: Observation and Discussion

Description: Watch a children's television program about superheroes. Talk to children who watch this program. Find out the following:

1. What are the superhuman powers that appeal to children?
2. What are the characteristics children admire in the superhero?
3. Do the superheroes do good or bad things?
4. How do children think real problems and disasters are prevented?

5. Do the children ever read about their heroes?
6. If children are interested in superheroes, take children to the library and find books that include myths and legends of ancient heroes. Use as a basis for class discussion.

Materials Needed: Copies of questions

Reference: Adapted from Singer, D. G., & Kelly, H. B. Parents, children, and TV. The Newsletter of Parenting, June, 1980.

8. VOCABULARY

1. Media--Methods of communication. Mass media includes such techniques as films, television, radio, books, etc.
2. Consumption--The act of using up.

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Construct a bulletin board entitled "Mass Media" (Figure #65).

Materials Needed: Background, construction paper, markers

EVALUATION

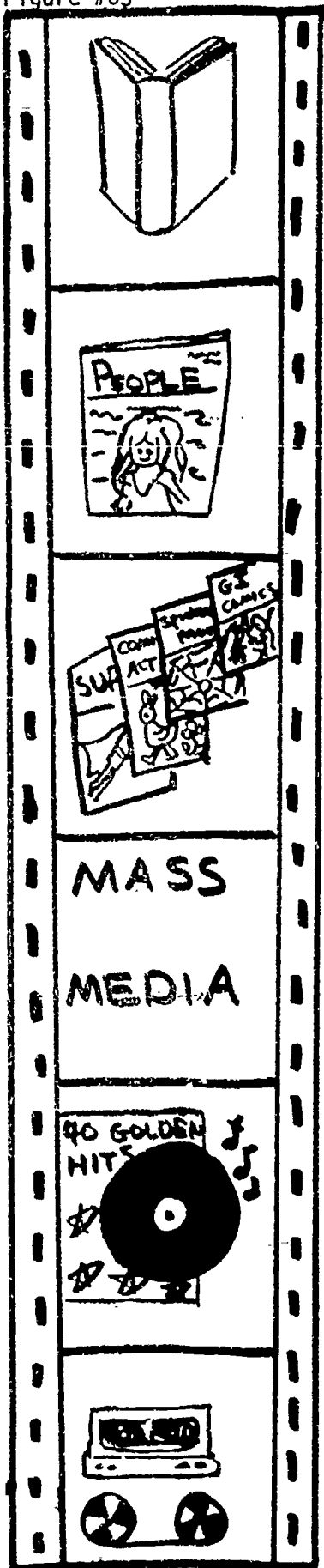
Title: Writing Assignment

Description: Write on "Television and the School-Aged Child." Cite advantages and disadvantages of television for children. Give suggestions for using television wisely and balancing mass media consumption.

Materials Needed: Paper, pen

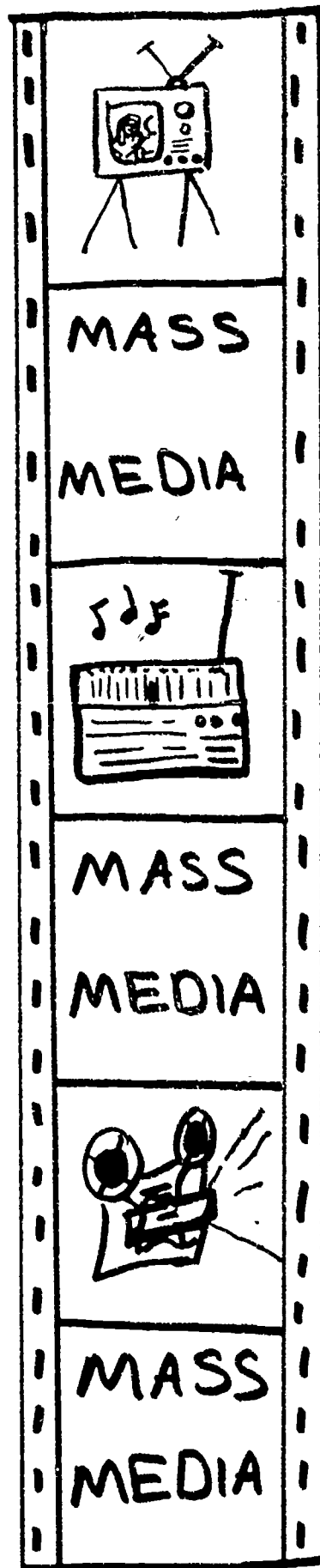
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Figure #65



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UNIT: Growth and Development of the School-Aged Child

CONCEPT: Moral Decision-Making

GENERALIZATIONS

1. During middle childhood, around age eight, children become cognitively able to distinguish right from wrong.
2. Moral development is a combination of cognitive development, self-control, modeling, and self-esteem.
3. Peer group pressure during middle childhood may negate moral decisions in some instances.
4. Moral development, or choosing right over wrong, is dependent upon decision-making capabilities, not fixed behavior traits, such as honesty.
5. Certain guidance approaches tend to foster moral behavior more than others.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Briefly characterize the moral development of a child in middle childhood and cite the role of the peer group in this development.
2. List the components of moral development and tell how each contributes to moral decision-making.
3. Explain why certain behavior traits, such as honesty, do not assure moral decision-making.
4. Describe some guidance approaches that foster moral behavior.

OUTLINE

- I. Moral Development Components
 - A. Cognitive Development
 - B. Modeling (Social Learning)
 - C. Self-control
 - D. Self-esteem

II. Guidance Approaches Fostering Moral Decision-making

- A. Democratic Methods (Mild, reasonable, and consistent discipline)
- B. Discussion and Clarification of Moral Values in the Family or Group
- C. Parental Example of Desired Behaviors

REVIEW OF SELECTED LITERATURE

Moral development, or moral decision-making rests on what individuals consider "good" and "bad," what they think they should or should not do, and the standards by which they judge the rightness of thoughts or actions. This sorting process results in the formation of a moral code. The family is the first teacher of such ideas through words, activity choices, treatment of one another, style of discipline, use of family resources, and other family choices. Young children accept what they see their families doing as "right." With age, they begin to see what other families believe is right and begin to wonder what is right? It is only when individuals have thought through their own values or standards that they are able to live successfully with those holding other views (McCandless, 1967). Children who blindly follow family values may be more likely to change when confronted with opposing ones, than children who have clearly thought through their attitudes.

During middle childhood the conscience develops at a rapid rate. It becomes less regulated by rewards and punishments and more by internal sanctions, or good feelings. It begins to move beyond rules about specific behaviors and is more generally able to apply standards to a broad range of behaviors. When conscience development is lacking because of a shortage of models, instruction, reward, and punishment, the child is apt to yield more easily to social temptations or to internal urges for uncontrolled behavior. Yet, if overly developed, the conscience may cripple the personality, owing to extreme guilt or defense mechanisms which can lead to severe psychological problems (Mussen, Conger & Kagan, 1979).

A social learning approach to moral development hinges on conduct and the forces that affect it, rather than logical thinking. As one observes that other people receive positive consequences for certain behaviors, they, in effect, become models for the observer. Their effectiveness depends on their characteristics and the relationship that they share with the observer. Parents and significant others, including peers, have greater impact as models when responses are seen frequently in a number of situations and when there is opportunity to repeat the desired behavior with guidance and support. Positive reinforcement through successful consequences help to facilitate moral development.

Religion, as it affects moral development, seems to have a greater influence on the thinking of the adolescent than on the child in the

middle childhood stage. The explanation may rest in the fact that the child interprets spiritual truths literally. As one observes a discrepancy between stated beliefs and behaviors, confusion may result. Nevertheless, the church can be a very real part of the child's life and a viable agency in the evolvement of a value system.

The ability to control behavior is crucial to moral conduct. In situations with much temptation and pressure, the way one focuses on the circumstances is more important than whether one focuses. Priorities for the continuation or termination of behaviors relate to the planning process which one adopts. Eventually, as the internalization of standards occurs, the response of the child is motivated by his/her own sanctions, rather than by external approval. This in turn promotes self-respect.

Moral development is not simply a set of good behaviors or habits, nor does it seem that physical punishment for misdeeds leads to long-term, internalized moral development. Rejecting children and being harsh and unreasoning are unlikely to produce effective moral learning. Even specific training in such good habits as obedience and responsibility fail to have appreciable impact on consistent moral development.

But there are helpful actions that assist the development of a helpful conscience or moral strength: parental example of the desired behaviors; discussions and clarification of moral values in keeping with the child's slowly developing ability to make judgments; and democratic guidance approaches, including mild, reasonable and consistent discipline (Chilman, 1966). Helping children to genuinely feel sorry for wrong actions is paramount to their revising their future actions; however, requiring them to apologize without actually feeling remorse only teaches them to lie.

In regard to honesty, more intelligent children are more inclined to be honest, but whether a person is honest seems to depend upon the situation rather than upon a trait of honesty. Older children are slightly more prone to be dishonest than younger ones, and there does not seem to be any difference between the sexes when evaluating honesty. Dishonest children more often come from homes with parental discord and poor example, inadequate or ineffective discipline, and unsocial attitudes toward children. More often than not, dishonest children seem to come from impoverished communities. Children are more likely to be honest when the teacher's attitude is cooperative and sympathetic.

Children's interpretation of rules affects moral decision-making. Between the ages of four to seven, children pretend to follow rules. Between the ages of seven to ten, rules become a fascination and competition is based upon rules. Around age eleven children, understanding the need for rules, use them to facilitate function. They may even invent their own rules. With maturity, the child realizes that rules can be maintained by mutual consent and that they can be changed the same way. While a young child may say it is wrong to lie out of fear of punishment, an older child is likely to say it is wrong to lie because

lying hurts others. The older child may further reason that telling one lie may lead to the need for further lies or that lying would not be beneficial in the long run. Although the young child may follow the rules because he/she fears the results of not following them, the older child realizes the rules benefit the accomplishment of the task at hand. This distinction on the part of the child is called "moral relativism."

Young children judge misdeeds by the size of the error, not by the intent of the action; hence, a child who makes a large ink spot on the table accidentally is thought to be in greater offense than the one who intentionally causes a smaller blot. The role of intent does not occur to the child in the early part of middle childhood.

With increasing cognitive and social abilities and while progressing from concrete to abstract thinking and from selfishness to otherness, the child makes "right" decisions from different bases as he moves through middle childhood. The young child does much out of a sense of fear of punishment and for individual pleasure or profit. Around age ten the child begins to do more good to please or help others and to gain their approval. Children also choose the "right" because they perceive it their duty or do so out of respect. Eventually a moral person is able to do the "right" thing because it is a societal standard and because it is a part of self-chosen ethical principles (Kohlberg, 1970).

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LEARNING ACTIVITIES

1. Title: Study Sheet

Description: Complete the study sheet on Moral Decision-Making.
Use as a basis for discussion.

Write "true" in the blank if the statement is true or "false" if the statement is not correct.

- True 1. The family is the first teacher of morals and values for a child.
- False 2. Children who blindly follow family values are less likely to change when confronted with opposing views.
- False 3. During middle childhood, the child's behavior is regulated more and more by rewards and punishments.
- True 4. Parental examples seem to be very important in moral development.
- False 5. A child should always be made to apologize for wrong actions.
- True 6. Older children are slightly more prone to be dishonest than younger ones.
- False 7. Boys tend to be more dishonest than girls.
- True 8. For the child age seven to ten, rules are very important and he is very rigid about them.
- True 9. A younger child does not lie because of fear of punishment, while an older child doesn't lie because he knows it will not benefit him in the long run.
- False 10. Older children judge misdeeds by the size of the error, not by the intent of the action.

Discussion

1. Give an example how these factors affect moral development:
 - a. Child rearing practices
 - b. Example of parents
 - c. Examples of peers
 - d. Religion
2. What kind of guidance techniques do you feel would foster moral decision-making?
3. Can you remember a time during middle childhood when you did something you knew was wrong? Describe what you did and how you felt.

4. Describe how you feel about others when they don't obey the rules. Do you think you felt differently when you were younger?

5. Can you remember a time when you shared something or performed a generous act for someone during middle childhood? Describe what you did and how you felt.

Materials Needed: Copies of study sheet

2. Title: Guest Speakers

Description: Invite a panel of ministers, child specialists, and policemen to speak on how they think morals are developed in school-aged children. Some suggested questions for the panel are: What child rearing practices seem to be useful in moral development? How do friends of children affect morals and values? Do you think a child can have an overly developed conscience? Students can add other questions.

Materials Needed: Letters inviting panel members and thank you letters

3. Title: Group Discussion

Description: Divide the class into several groups to discuss the following questions. Ask each group to report its answers.

1. What is the difference between tattling and reporting?

The reason for tattling is to hurt someone or to make self seem more important; reporting is the same action except for a different reason. Some actions definitely need to be reported!

2. Should a child be made to apologize for wrong behavior?

Probably not if the child does not feel genuine remorse. An adult may help the child understand and feel sorry for his/her actions. Then an apology would be desirable.

Materials Needed: None

4. VOCABULARY

1. Morality--Behavior that is acceptable to a particular society.

2. Conscience--Knowing the moral right and wrong of one's actions.

INSTRUCTIONAL AID

Title: Case Studies

Description: The teacher may find articles in Ann Lander's advice column that are applicable to the moral development of children. Another excellent source is found in Williams and Stith, "It's OK, Son, Everybody Does It," page 445. This story would be an excellent way to introduce discussion on how children learn right and wrong.

Materials Needed: Articles

Reference: Williams, J. W., & Stith, M. Middle childhood: Behavior and development. New York: Macmillan, 1980.

EVALUATION

Title: Writing Assignment

Description: Write a paper on the characteristics of moral development of a child in middle childhood. Cite the roles of family and peer group. Encourage students to trace their own development of a moral code.

Materials Needed: Paper, pen

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Personality: Self-Concept and Independence

GENERALIZATIONS

1. During the middle years, the self-concept is shaped by the treatment of parents, siblings, peers, friends, teachers, and other significant adults; experiences with success and failure, the mass media, body size, and state of health also influence self-concept.
2. The self-concept is shown through pride in personal appearance, eye contact and body stance, carriage, willingness to try new things, and acceptance of others and their ideas. Children's self-portraits may provide clues to their self-concepts also.
3. Children with healthy self-concepts are able to work toward healthy independence in resource management and decision-making.
4. Independence grows out of a realization of being an individual in one's own right and from the desire to achieve self-actualization, and to exercise autonomy, initiative, and industry.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Explain how various persons in a child's life help shape his/her self-concept.
2. List ways one reveals his/her self-concept.
3. Discuss the relationship of self-concept and independence striving.
4. Tell how the basic need to become self-actualized and the personality components of autonomy, initiative, and industry contribute to the desire for independence.
5. Enumerate some of the ways children ages six through twelve demonstrate a desire for independence in everyday living.

OUTLINE

- I. Self-concept Shapers
 - A. Persons
 - B. Physical and Social Conditions
 - C. Experiences

II. Self-concept Revealers

A. Physical Self

B. Social Self

III. Bases for Independence Striving

A. Sense of Autonomy: I Am a Person with a Will

B. Sense of Initiative: I Have Ideas

C. Sense of Industry: I Can Work and Accomplish Something

D. Need for Self-Actualization: I Can Become Someone More

IV. Manifestations of Independence

A. Being Responsible for own Personal Care

B. Making Decisions and Accepting Consequences They Bring

C. Functioning Away from Family for Longer Periods of Time

D. Making Own Friends and Spending More Time Away from Home

E. Following Through on Assignments at Home and School

REVIEW OF SELECTED LITERATURE

The self-concept has been termed the core of personality. As such, it serves as the clearing house for emotions, experiences, role perceptions, relationships, and need fulfillment. A psychological construct, "self-concept" has been called a commitment, rather than a true description of self (Jourard, 1974). The self-concept is so personal that it cannot be measured beyond mere positiveness or negativeness. It is the result of a cyclic process whereby others identify one's characteristics and communicate these perceptions to the person. He/she believes these perceptions and acts accordingly. The self-concept is a legacy from the significant others, conditions, and experiences during early and middle childhood, however correct or incorrect it may be. It consciously and unconsciously guides behaviors and influences attitudes and relationships. It affects the choices one makes, the way one treats friends and enemies, goal-setting, grooming and body care, body language, eye contact, stance, carriage, posture, voice and language. Often the self-concept can be revealed in a child's self-portrait.

Usually children develop a fairly stable image of themselves by the end of middle childhood; this image is typically positive and optimistic. Early formed concepts of self stay with persons throughout life, and maturation plays an important role in this process. Psychotherapy and remedial teaching can aid a lagging self-concept. Mild pressure or

reward which lead to success and positive recognition by persons one admires enhance feelings of self-worth. To preserve a good self-concept, children tend to select activities that will enhance them and avoid those which may prove damaging to their images (McCandless, 1967).

Children with good self-concepts are generally willing to try new things, be they academic or social. They relate to others well and enjoy group activities. They are able to make personal sacrifices or delay the gratification of selfish desires. They generally have more pleasant sibling relations, although they probably will still experience sibling rivalry. They feel confident in their abilities and are able to progress toward independence more readily than a child with poor self-concept. Self-concept has been shown more vital in school success than I. Q. (Williams & Stith, 1980).

Children from smaller families tend to have higher self-concepts than those from very large families, possibly as a result of more individual attention. Those from middle and upper socioeconomic groups feel better about themselves than those from the lower class, owing to economic and social standing in the community, perhaps. Children whose parents have employed democratic child-rearing methods fare better, as they have had their opinions respected and have experienced more successes in behavior than their counterparts under laissez-faire or authoritarian methods. Ordinal position seems to contribute to self-concept; first-borns and only children having the highest. This positive self-estimation may be owing either to their status in the family or more parental attention in the early years of life.

Whereas security as a basic need was of primary importance during early childhood, a growing need for self-expression and self-development emerges in the middle years. As children gain motor and intellectual abilities which allow their increasing freedom from adults, the peer group offers opportunities to develop self-determination, and school demands allow them to try their wings on out-of-class projects and reports. Children's feelings about accepting the consequences of their own decisions will fluctuate, and they will sense some conflict between the expectations of parents and peers.

Although the continuing security of home and school is of highest importance at this time, there is a need for children to grow in independence from adult domination. Trips alone to visit relatives, camping, choice-making in clothing selection and use of allowance, and club memberships provide ways for children to learn to live with their own decisions. Experiences gained through hobbies and encouragement to use their growing mental abilities in finding answers to questions of Why? Who? and Why not? are valuable.

It is during middle childhood that youngsters learn to assume care of their bodies and belongings. They can actively participate in family decisions and often set their own penalties for violation of standards. They frequently select their own friends and spend increasing amounts of time outside their homes. They can become responsible for more home duties and even occasional paying jobs in the neighborhood. Failure of adults to recognize the developmental nature of growing independence

may cause the child to experience feelings of rejection which can lead to behavior problems or even delinquent conduct (Williams & Stith, 1980).

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LEARNING ACTIVITIES

1. Title: Interviews

Description: Interview parents who have children ages six through twelve. Ask for examples of ways the children try to be more independent and of ways parents encourage independence. How much independence is demonstrated in clothing selection and use of an allowance? Use as a basis for class discussion.

Materials Needed: None

2. Title: Study Sheet

Description: Complete following self-concept study sheet as a pre-test or a review activity.

In each of the following pairs, write the letter in the blank of the one who is more likely to have a higher self-concept.

- b 1. a. A child from a large family.
 b. A child from a small family.
- b 2. a. A selfish child.
 b. A child who can make personal sacrifices.
- b 3. a. A child from a low economic level.
 b. A child from a middle income level.
- a 4. a. A child brought up by democratic discipline methods.
 b. A child reared by laissez-faire guidance.
- a 5. a. A child who relates well to others.
 b. A child who doesn't enjoy group activities.
- a 6. a. The successful child in school.
 b. The child with scholastic problems.

- b 7. a. The dependent child.
b. The independent child.
- a 8. a. The oldest child in the family.
b. The youngest child in the family.
- a 9. a. An adventurous child.
b. The child who is afraid of new activities.

DISCUSSION

1. Describe physical appearance characteristics that reveal self-concepts.

Grooming and body care, body language, eye contact, stance, carriage and posture, voice, language.

2. In what stage of development is the self-concept by the time a youngster reaches middle childhood?

Very well developed by end of middle childhood--usually stays with a person for life.

Materials Needed: Copies of study sheet (could also be used for evaluation)

3. Title: Observation

Description: Visit a shopping mall and "people watch." Tabulate the percentage of people you judge as having good or poor self-concepts. Compare your results with other class members and discuss what you looked for in making your decisions. After the discussion, visit a playground and repeat the activity with children ages five to twelve.

Arrangements Needed: Arrangements to visit mall and playground

4. VOCABULARY

1. Self-Concept--An individual's perception of total self.
2. Security--Safety, protection, or freedom from worry.

INSTRUCTIONAL AID

Title: Test your Ordinal Position Stereotype

Description: Adapt the test found on pages 133-134 in the Middle Childhood: Behavior and Development to determine ordinal position stereotyping.

Materials Needed: Copies of the test

Reference: Williams, J., & Stith, M. Middle Childhood: Behavior and development. New York: Macmillan, 1980.

EVALUATION

Title: Written Test

Description: Answer the following true-false statements by writing "true" or "false" in the blanks.

- False 1. A child from a large family is more likely to have a high self-concept than a child from a small family.
- True 2. The oldest child in the family is more likely to have a high self-concept than the youngest child.
- True 3. The child who is adventurous, independent, and successful in school is likely to have a high self-concept.
- False 4. A youngster's self-concept is not well developed until he/she reaches adolescence.
- True 5. Good grooming is indicative of a high self-concept.
- False 6. Because security is no longer important, there is a need for school-aged children to become more important.
- True 7. Hobbies, camping, and using an allowance are experiences that encourage independence.
- True 8. The child from a middle income family is likely to have a higher self-concept than the child from a low income family.
- True 9. Democratic discipline methods encourage positive self-concept development.
- False 10. Self-concept is an individual's perception of other people.

Materials Needed: Copies of statements

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UNIT: Growth and Development of the School-Aged Child

CONCEPT: Emotions

GENERALIZATIONS

1. Middle childhood people have greater control over their emotions than they did at younger ages.
2. Emotional maturity is the ability to react to varying stimuli in socially accepted ways and in a controlled manner, not denying emotions, or allowing them to become overwhelming.
3. Emotion is a three-part process: a subjective feeling, a physiological reaction, and an overt behavior which others label and interpret.
4. Emotions are subject to influence by physical well-being, mental state, and social pressure.
5. Emotional disruption can affect physical well-being, mental functioning, and social abilities.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Characterize the general emotional status of children during ages six through twelve, identifying the various emotions which they commonly experience and some stimuli precipitating each.
2. List some socially acceptable ways children in this age group might express the various emotions they experience.
3. Analyze the three-part emotional sequence in a given situation and tell how the process might be interrupted to avoid an uncontrolled, socially unaccepted expression of emotion.
4. Explain how emotional well-being influences and is influenced by physical, mental, and social well-being.

OUTLINE

- I. Types of Emotions
 - A. Love and Affection
 - B. Joy and Happiness; Delight and Elation
 - C. Curiosity and Wonder

- D. Fear and Anxiety; Worry and Despair
 - E. Boredom
 - F. Anger and Aggression
 - G. Jealousy and Hate
- II. Emotional Maturity
- A. Accepting One's Emotions, Not Denying Them
 - B. Controlling Emotions, Not Being Overwhelmed by Them
 - C. Expressing Emotions in a Socially Accepted Manner
 - D. Discriminating Appropriate and Inappropriate Times and Places to Express Certain Emotions
 - E. Utilizing Emotions to Accomplish Desirable Ends
- III. Three Phases of Emotions
- A. Stimuli (External Source)
 - B. Physiological Reaction (Internal Source)
 - C. Overt Behavior Interpretable by Others
- IV. Influences of Emotional Well-Being
- A. Physical State
 - B. Mental State
 - C. Social Condition
- V. Negative Influences of Emotion on Well-Being
- A. Loss of Appetite, Weight, Health
 - B. Inability to Concentrate, Learn, Reason
 - C. Incompatibility

REVIEW OF SELECTED LITERATURE

As a result of their increased mental capabilities and the rewards and punishments received in early childhood, children in the middle years are in greater control over expression of their emotions, feelings, and drives. They have been found through modeling and trial and error to release the emotional energy in more acceptable ways and to make their

temperaments more pleasing to others. This age is characterized by substantial gains in self-control and greater readiness to assume responsibility for actions (Pikunas, 1976). The following characterization of emotions at the various ages in middle childhood provide some notion of what to expect in their behavior, though each child may exhibit the various emotions in varying ways at slightly differing ages (Brisbane & Riker, 1971; Hawkes & Pease, 1962):

1. "Sixes" are generally excitable and tend to go to extremes in behavior. Preoccupied with themselves, they are demanding and are poor group members. They thrive on constant approval and like to help. They dawdle and are tattletales with no group loyalty. They become frustrated over lack of fine motor skills. Modesty is manifest.
2. Seven year olds are less stubborn than six year olds, more easily controlled, polite, sensitive, and responsive. They are anxious about mistakes and criticism of others and strive to please.
3. At eight, children are sensitive to approval and criticism and are self-confident; therefore, they may appear to be bossy at times. Showing more spirit, they are inclined to argue, be outgoing, curious, and move from one pursuit to another, and one group to another. Eight year olds have developed a sense of fairness and evaluation of rights of others. They are willing to accept guidance from parents and teachers, love to talk, and are affectionate and friendly.
4. The nine-year-old is congenial, dependable, cooperative, accepts responsibility, and tries to do things well. Praise builds ego and greater endeavor. The nine-year-old is developing a sense of fair play and concepts of right or wrong. Privacy is important at this age.
5. Ages ten and eleven may show extreme differences in maturity, and some will make radical emotional changes while others remain stable. When jealous, they may be cutting and vindictive. Feelings are easily hurt and behavior away from home is usually better than in the family group. Fidgeting and constant activity are anxiety relievers. This age group often objects to instructions and public displays. They may be selfish, domineering, argumentative, considerate, polite, truthful, and amenable. By this age they know when they are doing wrong.
6. Some twelve year olds are developing noticeable emotional control. They are congenial with parents, friends, and siblings; outgoing; cooperative; considerate; and less self-centered. They see themselves as one of a group, not part of it. Pre-adolescents can execute details in sports, clubs, or meals. They have acquired some tact, are improved conversationalists, have anger and fear under control, show a decrease in jealousy, may get along better with peers, but still get provoked by them.

Love and affection are basic needs of all human beings that make it possible to love others and to belong to groups. Love allows for

identification with others and the internalization of values and attitudes. Being loved helps in adjustments to situations involving strong and unpleasant emotions (Prescott, 1952). Children who experience a lack of love are less able to relate to others and may acquire personality traits of aggression, dependency, and disobedience. The unloved child may find it difficult to concentrate, and speech may be affected. Lack of love in infancy can lead to psychosomatic illnesses and listless activity patterns which can impair proper physical development. Overt expression of love generally declines during the six through twelve age span, particularly for boys. Affection is often expressed by confiding special secrets, helping at home, or conforming with wishes of adults (Brisbane & Riker, 1971).

Joy comes to children from a variety of sources--from feeling better after telling the truth, to new neighbors their own age; from finishing a puzzle, to being in the kickball circle the longest. It can be nurtured in innumerable ways by adults and other children.

Curiosity and wonder are not natural phenomena, but must be developed through accumulation of appropriate concepts and models and experiences that lead them to "find out." By school-entrance age, children may ask up to four hundred questions daily, an indication of their curiosity level.

Fear and worry in the middle years are usually owing to the rapidly expanding world of the child. New experiences for which they have no set of reactions, ignorance of the environment, and curiosity combine to cause some fears and worries. Typical worries are parental death, doing poorly in school, and not being liked. The peak ages for fear are three and eleven (Honzik, MacFarlane, & Allen, 1954). A great number of children's fears are unrelated to actual experiences they have had. With increasing age, their worries shift from family and school to thoughts of embarrassment, guilt, and personal and social inadequacy. Fear intensity depends greatly upon family relationships (Thiesing, 1971).

In Maurer's 1965 study, the determination was made that for children between ages five and twelve, the incidence of fear of people and their actions nearly doubled. These fears included people with guns, divorce, and child enticers. Such adult dreads as traffic accidents, germs, and kidnappers were rarely mentioned.

Much of children's misbehavior is caused by the feeling "there is nothing to do" (Jersild, 1960). Fatigue and even some pain may be a result of boredom. Children try to fight boredom with daring inventiveness.

Children's anger is often the result of an inability to cope with some situation in their environment, or to do what they desire because of restraint, inhibition, or lack of skill. They may be angry with the circumstances (rain), materials (stubborn boots), peers, or even themselves. Adults are common causes of childhood anger, as they seek to set and enforce limits. During middle childhood, expression

of anger moves from physical to verbal means. Anger occurs more often during fatigue, hunger, in strange surroundings, or with strange companions. The transition from home to school at the age of about five or six, and the period of criticism or teasing for ages eight through nine, tend to challenge their anger control. They express anger by belittling, sneering, plotting, psychologically withdrawing, and scapegoating (Williams & Stith, 1980). Aggression is different from anger in that it often is behavior which intends to injure or destroy animals, humans, or inanimate objects. Patterns of childhood aggression remain fairly stable into adolescence and adulthood. Aggression seems linked to biological states as well as being strongly influenced by family and cultural factors (Feshback, 1970; Kagan & Moss, 1962).

Jealousy is said to be a universal emotion, virtually unavoidable in children. It rises from insecurity in relationships and often accompanies feelings of anger and inferiority. Jealousy is expressed in such forms as bedwetting, allergies, temper tantrums, and cruelty to animals. The arrival of a new sibling is often the cause of jealousy. Persons of higher intellect tend to be more jealous, and girls more than boys. Over-coddling tends to foster jealousy, and families with two or three children experience more of this emotion than larger families or those with an only child. Reduction of jealousy comes through building self-confidence, providing satisfying experiences, and helping the jealous child to develop interest outside himself/herself.

The emotionally mature person does not deny or mask emotions, but acknowledges his/her feelings and expresses them in the right place at the right time and in the right manner to accomplish the purpose to be served (Rogers, 1962). Children are unable to reach emotional maturity in middle childhood. In helping them work toward this end, it may be beneficial to realize that emotions are evoked by external stimuli, such as persons, circumstances, or events. Such stimuli cause physiological reactions as they are interpreted by the individual; these physiological reactions are largely autonomic. They may be indicated by a flushed face, a dry mouth, an increased heart rate and blood sugar, a headache, and sweating palms. They are usually accompanied by some controllable overt expression of emotion, such as a scream, an oath, or a frown. Being able to control the interpretation of the initial stimuli and the overt expression leads to emotional maturity. Knowledge, health, security, application of logic, and familiarity all aid in this type of control. The lack of them can lead to physical, mental, and social debilitation as a result of emotional immaturity. Hence, poor emotional development can affect other types of development, and the other types of development impinge upon emotional development.

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Good for parents, teachers, and students interested in working with children. It will help those closely related to children to better understand their behavior.

- Norton, R. G. Parenting. Englewood Cliffs: Prentice-Hall, 1977.

Excellent for parents, grandparents, teachers, or anyone working with children. Will help improve communication, help children solve social problems, provide cues for positive behavior.

- Paplia, D. E., & Olds, S. W. A child's world. New York: McGraw-Hill, 1975.

A comprehensive study of children and the adolescent.

LEARNING ACTIVITIES

1. Title: Observations

Description: Observe some elementary school children. What makes them laugh? What kind of jokes do they tell? What overt behavior is observed that represents emotions (crying, hugging, smiling, shouting)? Describe the general impression you received about the emotionality of the observed children.

Materials and Arrangements Needed: Permission to observe children, paper, pen

2. Title: Mobile

Description: Find pictures in old magazines that illustrate the following emotions in middle childhood people: joy, love and affection, jealousy, boredom, fear, worry, and anger. Mount these pictures, laminate, and hang as a mobile in the classroom. As the mobile is being hung, discuss childhood memories of these emotions that students have.

Materials Needed: Old magazines, construction paper, laminating materials, yarn, scissors

3. Title: Writing Assignment

Description: Write descriptions of physiological reactions you experience when you are embarrassed, extremely angry, very nervous, and very happy.

Materials Needed: Paper, pen

4. Title: Game

Description: Make a "Wheel of Emotions" (Figure #66) on white poster board with an arrow attached to the center so it will spin. Divide the class into two groups. Each group will choose one person to spin and one to be their spokesperson. Group 1 will spin. They will have to identify the age appropriate to the descriptions and give an example of a way a child that age may act. The spokesperson will confer with the group before giving an answer. Anyone in the group can be called on to portray the behavior. If the team answers and portrays the behavior correctly, it receives ten points. If not, Group 2 gets a chance to answer correctly for five points. Group 2 then gets its turn to spin the wheel. The group with the most points wins.

5. VOCABULARY

1. Aggression--Behavior that intends to hurt physically or emotionally an animal or person. May also be directed toward an inanimate object.

2. Jealousy--A sense of rivalry or envy.
3. Incompatibility--Not being able to get along; mutually antagonistic.
4. Stimuli--Plural of stimulus--something that arouses, excites, or causes activity.

INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Make a bulletin board entitled "Mixed Emotions" (Figure #67) showing a two-sided face--one side happy and one sad, surrounded by mixed emotions children may experience in middle childhood. This could be used when discussing the wide range of emotions that individuals experience. Discussion could include ways of dealing appropriately with emotions and ways of balancing emotions to achieve emotional health. Emphasis should be given to the fact that emotions are not good or bad, but that behavior that expresses emotions may be appropriate or inappropriate.

Materials Needed: Yellow or white for happy face. Gray or black for unhappy side. Use black lettering on happy side. Use light lettering on sad side.

2. Title: Film

Description: "That's My Name--Don't Wear It Out!" (a color film). In this contemporary story from Canada, a troublesome, but sensitive adolescent befriends a deaf youngster. Both boys mature from the relationship. The older boy becomes less wary of involvement, and the younger boy learns to push beyond the limitations of his handicap.

Materials Needed: Film, projector

Reference/Source: Film "That's My Name--Don't Wear It Out!" Available on loan from Regional Film Library, Louisiana Tech University, Tech Station, Ruston, LA 71272. Film is from Learning To Be Human Series, New York: Learning Corporation of America, 1979. Summary was taken from teacher's guide.

EVALUATION

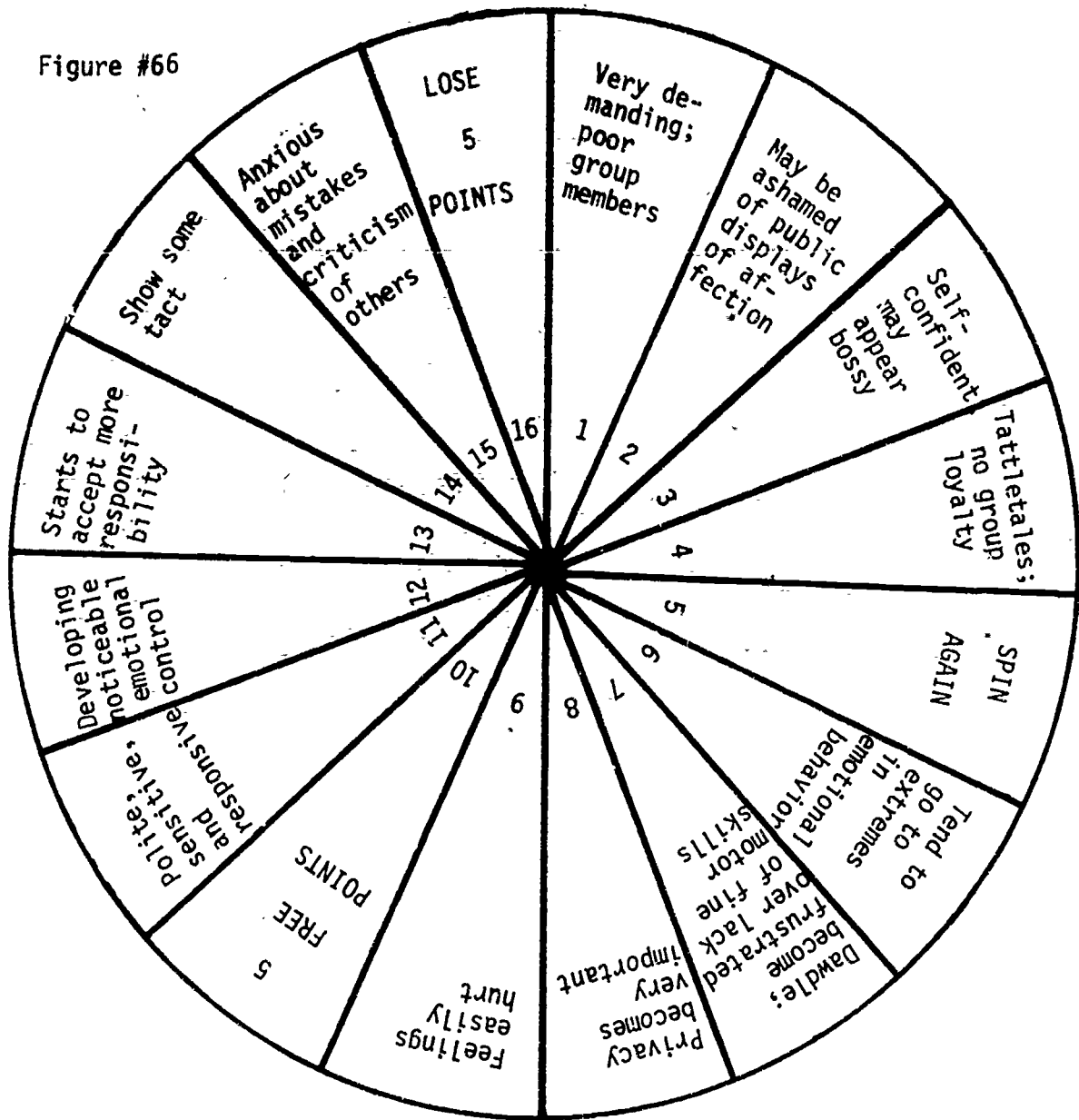
- Title: Role Play

Description: Divide the class into groups of two or three. Give each group an emotional situation. First role play a parent who gives a negative response and then role play a positive response. Suggested situations include:

1. Bobby spilled his milk at the supper table, and he is very sorry.
2. Jane is afraid of storms, and it is lightening outside.
3. Friends made fun of Betty because she is taller than everyone else.
4. Jamie is sad because his dog died.
5. Sally is mad because her little sister broke her favorite doll.
6. Jody doesn't want to share the bicycle with Mary.
7. Melinda has asked her mother at least two hundred questions today.
8. Roger is depressed and bored because it is raining, the TV is broken, and the batteries are dead on his favorite game.
9. Abby is going to a new school today; she's worried and frightened.
10. Susan is angry because her knee socks won't stay up.

Materials Needed: Copies of situation descriptions

Figure #66



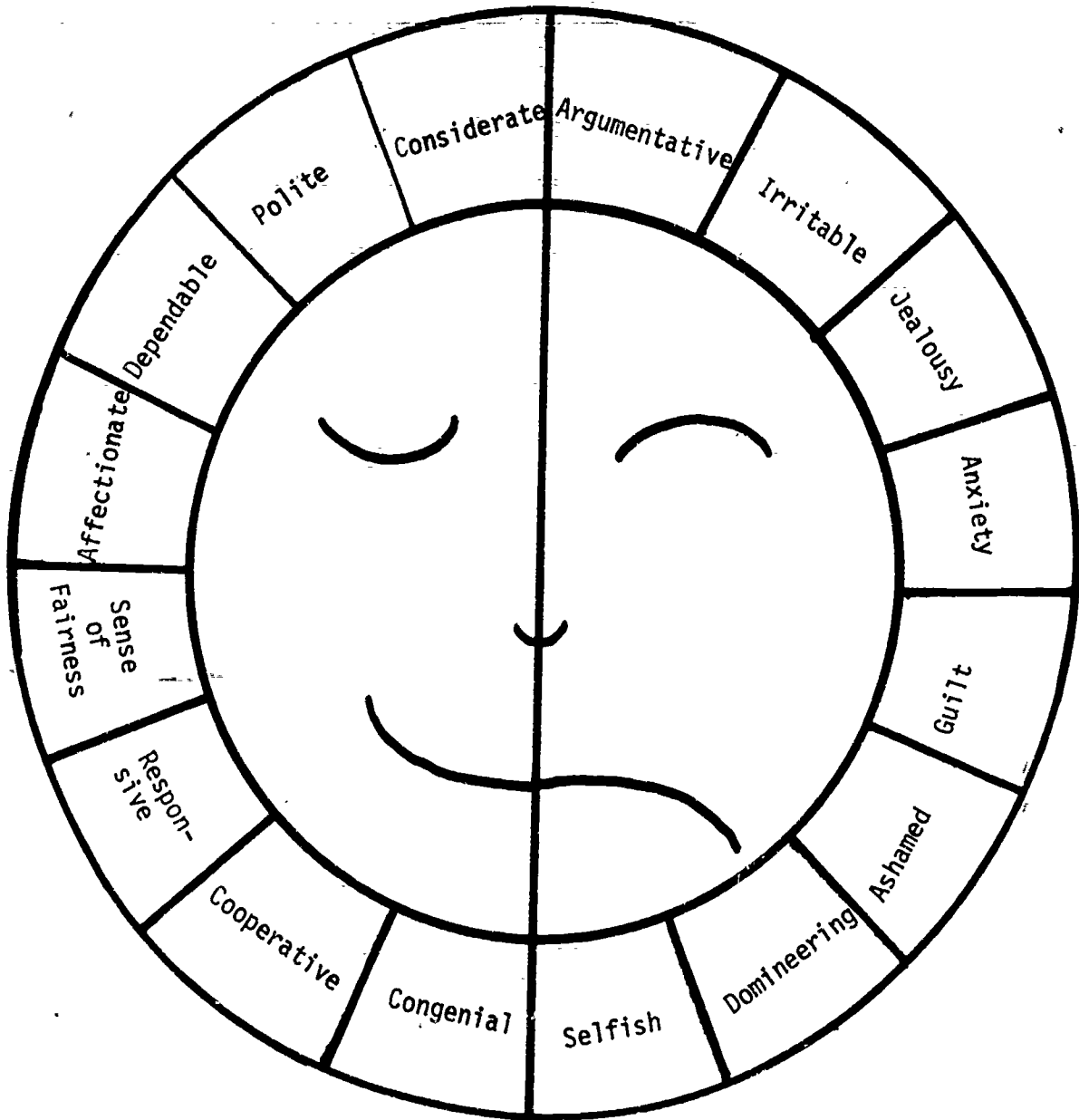
WHEEL OF EMOTIONS ANSWERS

- | | |
|-------------|-------------|
| 1. 6 | 9. 10 or 11 |
| 2. 10 or 11 | 10. 0 |
| 3. 8 | 11. 7 |
| 4. 6 | 12. 12 |
| 5. 0 | 13. 9 |
| 6. 6 | 14. 12 |
| 7. 6 | 15. 7 |
| 8. 9 | 16. 0 |

Children are individuals and emotional development varies from one person to the next. Many of these feelings do apply to more than one age. These are based on Review of Literature.

Figure #67

MIDDLE CHILDHOOD



MEANS

MIXED EMOTIONS

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Sex and Social Role

GENERALIZATIONS

1. Children learn their sex roles and social roles primarily within the family, usually modeling after their same-sex parent.
2. A major portion of personality revolves around one's sex and social-role development.
3. Generally, both the male and female establish primary sex-identification with the mother or mother surrogate.
4. Peers are not as important as parents in sex-role typing, but they do play reinforcing parts in the process.
5. The interaction of siblings, ordinal position of the child, child-rearing practices, and parental age are determining factors of role assumption.
6. Today in America, the social role of the sexes is more fluid and less rigid than in any previous time in history.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Tell where children learn their sex and social roles.
2. Briefly discuss how sex-role identification and sex-typing occur in young children.
3. Identify some factors which help school-aged children solidify their sex roles.
4. Give examples of the influence of sex role in everyday living.

OUTLINE

- I. Factors in Development of Sex Role and Social Role
 - A. Home
 - B. Neighborhood and Community
 - C. Experiences

II. Steps in Sex-Role Identification

- A. Identity with Mother or Mother Surrogate
 - 1. Through interaction (infants)
 - 2. By initiation
- B. Adaptation to Physical-Social Reality
 - 1. Male children (two to three years old)
 - 2. Through trial and error
- C. Differentiation (By Age Five)
 - 1. Between more obvious biological clues to maleness and femaleness
 - 2. Psychological cues to masculinity and femininity
- D. Sex Cleavage (Ages Seven to Ten) to Practice Own Sex Identity within Same-Sex Group
- E. Heterosexual Attraction (Adolescence) to Practice Own Sexuality with Opposite Sex

III. Examples of Sex Role Impact in Everyday Living

- A. Parental Expectations: Aggression in boys; obedience in girls
- B. Physical Gestures, Body Stance, and Gait
- C. Group Affiliations
- D. Dress Customs
- E. Cultural Artifacts: Toys, Collections, Furnishings, Room Decor
- F. Roles: Occupations and Expressive
- G. Games and Pastimes
- H. Competencies: Mechanical and Interpersonal

REVIEW OF SELECTED LITERATURE

A major part of an individual's personality revolves around sex-role development, and the process of sex-typing begins early in life. In North America the sexes are generally socialized differently, although currently there is a movement toward less differentiation among some segments of the society. Children learn their primary sex-role identity through the mother or her surrogate (Lynn, 1969). Around age two or three, boys realize that they do not belong in mother's sex category, but in father's. They then begin to emulate more significant males in their environment. Because of the small amount of time American fathers

spend with their sons, the transition is not always a smooth one. For males, sex-role typing involves not only copying but differentiating between what females in their environment do and how males are supposed to be different. Fathers serve as definers of standards of masculine behavior and exact a degree of adherence to these standards through generous time allotment to boys.

The peer group reinforces sex-role typing, and children learn about their sexuality through curiosity, which leads to exploratory activities with the same and opposite sex playmates. They go through a period between the ages of seven and ten when sex cleavage is common and when it is the "thing to do" to abhor the opposite sex.

Lee and Gropper (1974) have identified nine distinctive features of sex roles in North America: differences in socialization (child rearing practices and expectations); verbal and non-verbal expressive styles; physical gesturing (posture, gait, stance, limb movement); group affiliations (Boy and Girl Scouts, sororities and fraternities, sewing and flying clubs); dress customs (style and place of purchase); cultural artifacts (toys, furnishings, decor); roles (occupations and disciplining vs. expressive and nurturant; games and pastimes (high or low risk); competencies (interpersonal and mechanical).

A child decides what is masculine and what is feminine through observation. Sex roles continue because of the comfort of habit and tradition and the association of moralism with sex role conformity. Children should have equal access to educational and cultural resources so their choices can be based on individual preferences and aptitudes, not merely biological sex. Improper sex-role development precedes the school-age period. To guard against negative sex-role development, children should never be threatened or shamed about curiosity over sex differences. Children should not be overstimulated through love play which may cause guilt feelings that could lead to withdrawal from normal relations with the opposite sex. Children should receive love and respect for whatever sex they are. A warm tie between the child and the same-sexed parent fosters emulations of this parent and facilitates proper sex-role development.

Children pick up not only facts but feelings and values related to sex during middle childhood. This is a crucial time for the development of sexuality. Both sexual occurrences and nonsexual development lay the foundation for future encounters with sexuality (Williams & Stith, 1980).

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LEARNING ACTIVITIES

1. Title: Survey Experiment

Description: Compile a list of at least twenty descriptive words (such as "kind," "polite," "brave," "slow," "running"). Present the list to a class of sixth-graders. Ask the students to label each word with a "G" if the term describes girls, "B" if it describes a boy, or "GB" if the term describes girls and boys. Compile the results and determine the extent traditional stereotyping is accepted by these students.

Materials Needed: Copies of terms

2. Title: Social Behavior Analysis

Description: Social behavior is learned, often from same-sex parents. Analyze who taught you everyday activities such as how to make a bed, how to set a table, how to drive, and how to write a check.

Materials Needed: List of everyday activities

3. Title: Discussion

Description: Discuss traditional feminine and masculine characteristics. Determine which characteristics would be desirable in both sexes.

Materials Needed: None

4. Title: Group Discussion

Description: Divide into groups, discuss examples of sex roles and the following:

- | | |
|--------------------------|----------------------|
| 1. Parental expectations | 5. Occupations |
| 2. Physical gestures | 6. Games and hobbies |
| 3. Group affiliates | 7. Dress customs |
| 4. Room decors | 8. Selection of toys |

The examples might be from personal experience, or from movies, television, or literature.

Materials Needed: None

5. VOCABULARY

1. Sex-role identity--The sense of knowing what it means to be male or female.

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Find pictures in old magazines that illustrate sex stereotyping in children. Arrange these on a bulletin board and use as a basis for discussion.

Materials Needed: Old magazines, scissors, backing for background

EVALUATION

Title: Writing Assignment

Description: Select one of the following and write at least two paragraphs: (A) Explain how children learn what is masculine and what is feminine. Cite examples of parental and peer influences. (B) Explain the difference between these two terms-- sex-role stereotyping and sex-role identity.

Materials Needed: Paper, pen

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Educational Experiences

GENERALIZATIONS

1. School is a major socializing agent in the life of the child.
2. The family forms basic attitudes toward education and largely determines the school success a child will have.
3. Most children benefit from the school experience although there are some problems.
4. Other agencies provide educational experiences for school-aged children.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Delineate some of the functions of the school in the life of children ages six through twelve.
2. Discuss ways the family affects a child's attitude and success in school.
3. Relate some skills children acquire during their first six years in school.
4. Briefly discuss some potential problems children face in school.
5. Enumerate non-school educational experiences available to children.

OUTLINE

- I. Functions of the School
- II. Effects of Family on School Success
- III. Skills Acquired in Elementary School
- IV. Potential Problems
- V. Other Educational Agencies Serving School-Aged Children

REVIEW OF SELECTED LITERATURE

America's free public school system has been called one of the greatest contributions to the world. It is looked upon as the salvation of democracy, the solver of social and economic problems, and the major educator in life skills. The school is expected to teach a host of skills, ranging from those needed for success in games and sports to the tool subjects of reading, writing, and calculating. It offers the major opportunity for children to learn age-mate relations and provides a setting in which one's self-concept may be enlarged and enhanced. The school assists in sex-role development and in the refinement of social behavior which will reflect the society's moral code. The school provides a laboratory for working toward independence and such basic ideals as racial and religious tolerance, respect for civil rights, and international cooperation (Havighurst, 1952). Parents receive help in their role through school-sponsored study groups, such organizations as the PTA and through intermittent conferences with school personnel. Most teachers have knowledge of growth and development which many parents are eager to learn. Teachers also help children solve personal problems through referral and special approaches to learning; the transient child, the handicapped, and the child with a behavior problem all have special needs which the school can help to meet (Williams & Stith, 1980).

White (1975) has estimated that the family's contribution to a child's educational success has more of an impact on the child's total educational development than the formal educational system itself. If a family does its job well, the professional can then provide effective training. If not, there may be little the professional can do to save the child from mediocrity. It is in the home that the basic attitude toward all learning is taught. Most children begin school with high anticipation of the event. If, through exposure to adults, learning materials, chances to prove their own abilities, or excursions into the community, they have acquired some basic notions of their world and their abilities to function in it, formal education will be more meaningful. When children find at home a quiet place to study, a respect for their school activities, help with work when needed, and parental interest in progress made, learning at school is fostered. When children's basic needs are being met at home, they more readily benefit from the programs offered at school. Bloom has proposed that ninety-five percent of the students can learn all the school has to teach them at about equal level of mastery, that one to three percent cannot master the material, and one to two percent have superior learning abilities. Past experiences, motivation to learn, cues about what to learn, participation opportunities, reinforcement, and feedback are necessary qualities for instruction (Harvey & Horton, 1977).

Whereas many children thrive on competition and react to mild pressure with increased achievement, some children succumb to these factors in school. Too much pressure to excel academically, athletically, or socially may be enough to make middle childhood painful. Combined, these pressures can make life almost intolerable for the growing child. One little boy exclaimed, "There are about two million things I don't know, and I've got to learn them all in the second grade!"

The behavior of children in school can be greatly affected by the teacher's behavior. Children do best in school when teachers employ democratic methods, know their subject matter, are interested in the students, and are not overly concerned with their own problems. When teachers are rigid, hostile, or unresponsive to students' needs, children cannot experience optimal growth (Mussen, Conger, & Kagan, 1979).

Alternative methods of education are sometimes effective when traditional methods fail: grass roots schools with flexible scheduling and freedom of choice learning; open classrooms featuring informal learning; non-graded schools with homogeneous grouping and continual progression, no failure; computer assisted instruction with learning modules; individual prescriptions tailored to each child's level and needs (Smith, 1972).

Criterion-based evaluation is replacing letter grades in many schools. This reduces competition and is more subjective than traditional paper-pencil testing (McClendon, 1976). A worthy goal is to eliminate retention, a practice which holds many social-psychological consequences and does not insure mastery of subject matter (Godfrey, 1970).

The community offers a host of educational experiences for school-aged children which complement the work of the home and school. Free public libraries and museums provide reading, listening, and viewing materials and programs. Organizations for youth and camps lend support to children's concept development as well as leadership and followership skills and age-mate relations. Churches and synagogues typically offer instruction in moral and religious concepts as well as recreational opportunities. Private studios which teach such arts as dance, music, and physical conditioning are available in most communities. Agencies and clubs offering supplementary educational experiences are numerous, varied, and serve to round out the child's total growth and development.

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LEARNING ACTIVITIES

1. Title: Guest Speaker

Description: Many elementary teachers save notes and letters they have received from previous students about the students' learning experiences while in school. Invite a teacher to come and share some of these letters with the class.

Materials Needed: Letter inviting teacher, thank you letter

2. Title: Presentation

Description: Develop a presentation on the functions of school and the effects of the family on school success. Emphasize ways parents can help their children in school. Present at a local PTA meeting.

Materials Needed: Visuals selected for presentation

3. Title: Research Assignment

Description: Find out what these alternative methods of education mean--(1) flexible scheduling, (2) freedom of choice learning, (3) open classrooms, (4) non-graded schools, (5) no failure classes, (6) computer assisted instruction. Inquire about what alternatives are offered in the local parish.

Materials Needed: Library references

4. Title: Game

Description: Complete "Dial-The-Answer Game" (Student Handout #29).

Key:

1A. Reading	2. Home
1B. Self	3. Pressure
1C. Role models	4. Democratic
1D. Independence	5A. Libraries
1E. Peers	5B. Camps
1F. Personal	5C. Churches
1G. Parent	

Materials Needed: Copies of game

Reference: Adapted from Brisbane, H. The developing child-student guide. Peoria, Illinois: Charles A. Bennett, 1980.

5. VOCABULARY

1. **Transient child**--A child who moves from one school to another often.
2. **Competition**--Rivalry; trying to do something better than someone else.
3. **Retention**--Retaining; repeating a grade or class.

INSTRUCTIONAL AIDS

1. Title: Transparencies

Description: When discussing or lecturing on the functions of school and the effects of the family on school success, use transparencies entitled "Effects of Family on School Success" (Figure #68) and "Functions of Schools" (Figure #69).

Materials Needed: Transparencies, overhead projector

2. Title: Mirror Code Assignment

Description: Give students the following assignment in mirror code:
(1) list several functions of school for the middle childhood person;
(2) how does a family influence a child's success in school?;
(3) name some educational experiences that exist outside the home and school. Directions for handwritten mirror code messages--Place a piece of carbon paper, carbon side up, under two sheets of paper, write the above assignment on the top sheet, pressing firmly. The assignment will be on the back of the second sheet.

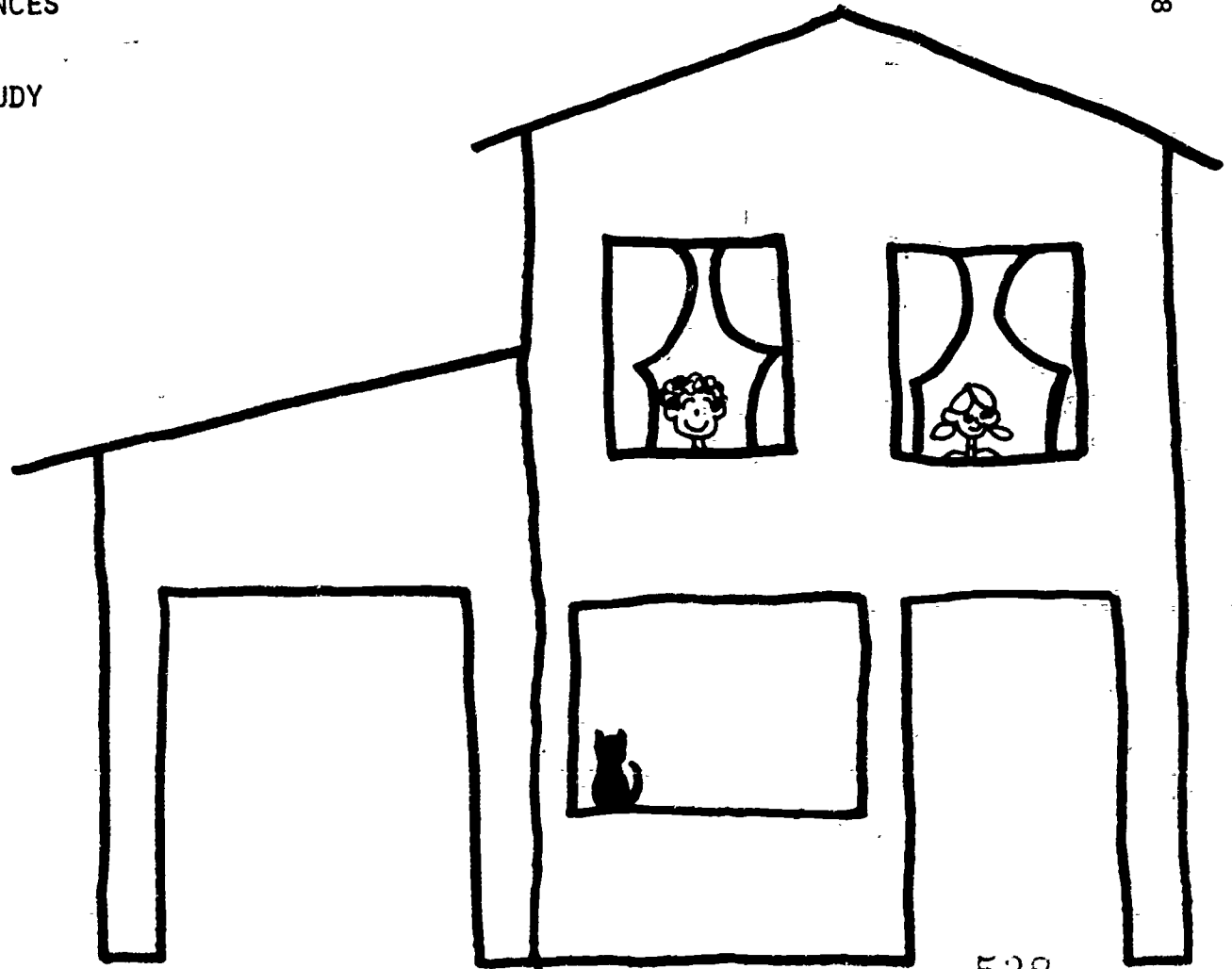
Materials Needed: Paper, carbon

Reference: Instruction for mirror code from Schmelzel, C. How to design your own puzzles. Forecast for Home Economics. December, 1976, p. 13.

EFFECTS OF FAMILY ON SCHOOL SUCCESS

- A. READINESS EXPERIENCES
- B. PROVISIONS FOR STUDY
- C. INTEREST
- D. CULTURAL LEVEL
- E. EMOTIONAL CLIMATE

Figure #68



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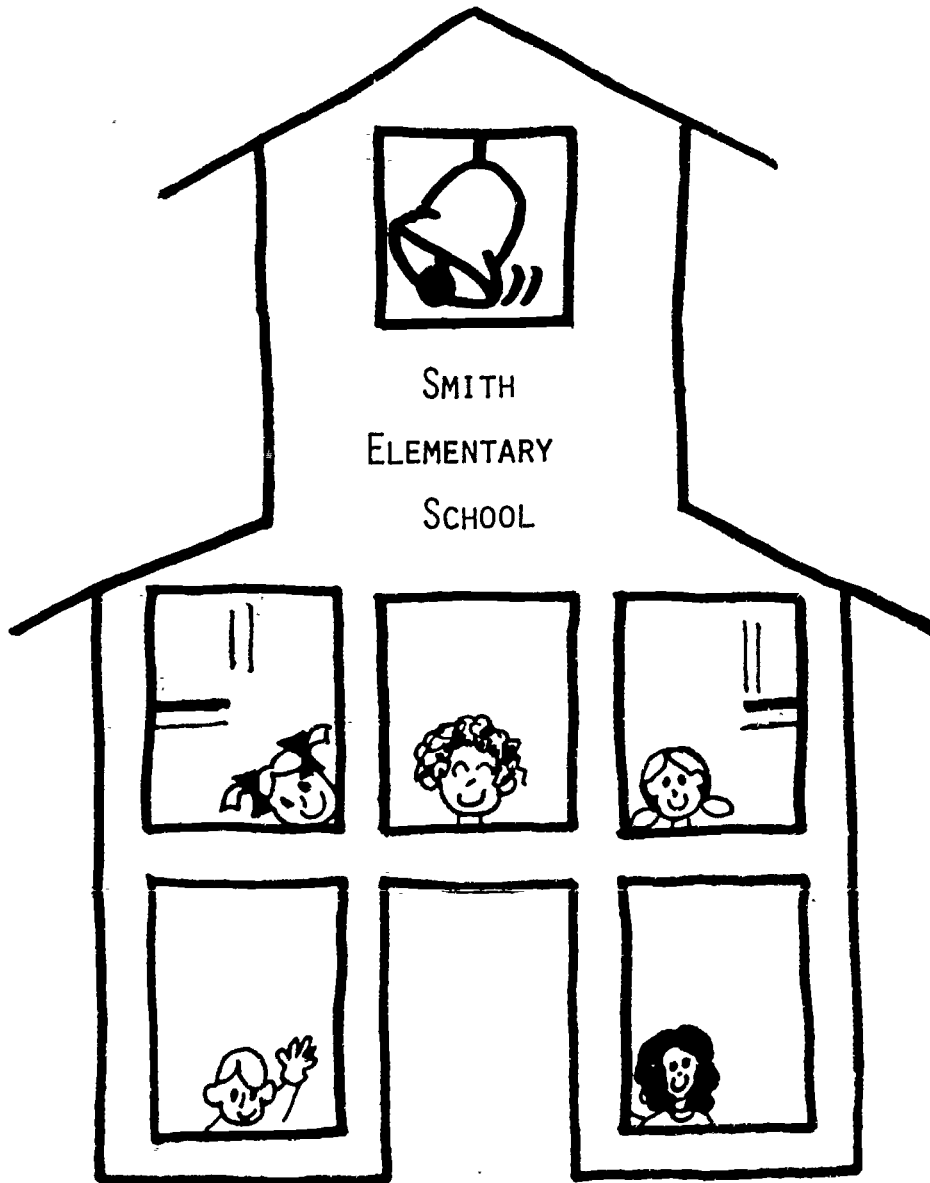
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FUNCTIONS OF SCHOOL

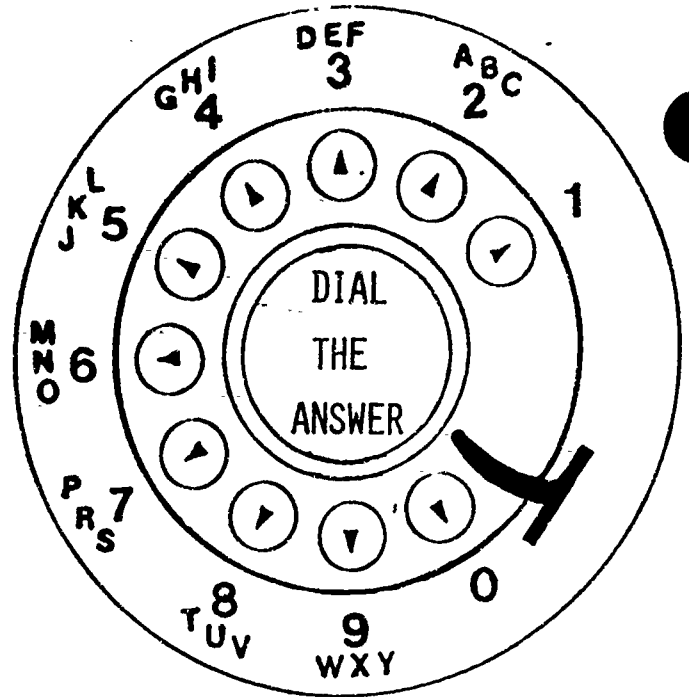
- A. BASIC SKILLS
- B. ATTITUDES TOWARD SELF
- C. ROLE MODELS
- D. INDEPENDENCE
- E. SOCIAL RELATIONS
- F. PERSONAL PROBLEMS
- G. PARENT EDUCATION

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Dial-The-Answer Game
Student Handout #29

Write the correct answers in the blanks. If you do not know an answer, use the telephone dial as an aid. If you do know the answers, use the telephone dial to check your work.



- The functions of school are (A) to teach basic 1. A skills such as _____, (B) to foster wholesome attitudes toward _____, (C) to provide suitable _____, (D) to foster _____, (E) to develop social relations with _____, (F) to assist with solutions to _____ problems, and (G) to further _____ education.
- It is in the _____ that the basic attitude toward all learning is taught.
- Many children thrive on competition, but too much _____ can cause serious problems.
- Children seem to learn best when teachers use _____ methods.
- The community offers several educational experiences for school-aged children: (A) _____ offer reading, listening, and viewing activities, (B) _____ and youth clubs foster leadership and followership skills and peer relations, (C) _____ offer moral instruction as well as _____ recreational opportunities.

- A 7 3 2 3 4 6 4
B 7 3 5 3, C 7 6 5 3
6 6 3 3 5 7
D 4 6 3 3 7 3 6 3 3 6 2
E 7 3 3 7 7
F 7 3 7 7 6 6 2 5
G 7 2 7 3 6 8
- 4 6 6 3
- 7 7 3 7 7 8 7 3
- 3 3 6 6 2 7 2 8 4 2
- A 5 4 2 7 2 7 4 3 7
B 2 2 6 7 7
C 2 4 8 7 2 4 3 7

UNIT: Growth and Development of the School-Aged Child

CONCEPT: Concept Development

GENERALIZATIONS

1. Between ages six and twelve, children's conceptualization moves from egocentric trial and error to logical abstract thinking.
2. Children develop concepts of two major types in this age range: concrete and abstract.
3. Children have many faulty concepts in the first part of middle childhood.
4. The ability to consider multiple characteristics, cause and effect, and the viewpoint of another person emerges during middle childhood.
5. Humor is one index of concept development.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Characterize some of the faulty thinking of middle childhood people.
2. Give examples of concrete and abstract concepts.
3. Explain the role of humor in the life of the school-aged child.

OUTLINE

I. Conceptualization

- A. Trial and Error; Imitation (Pre-operation)
- B. Logic in Concrete Application (Concrete Operation)
- C. Abstract Logic (Formal Operation)
- D. Factors

II. Humor

- A. Index of Ability to Reason
- B. Related to Past Experience
- C. Functions
- D. Guidance

REVIEW OF SELECTED LITERATURE

Piaget (Brainerd, 1979) suggests that mental development proceeds through four stages and that each person passes through each stage at roughly the same age. Maturation of the central nervous system and the experiences the person has had are the determinants of each individual stage. The first stage is during birth to age two, when responses are typically from a sensory-motor base in terms of reflexes, imitation, and habit. Between ages two and seven, the child makes judgments on the basis of trial and error and consequently, makes many errors. Children continue to use imitation, or modeling, and operate from an egocentric viewpoint. Children at this age are unable to imagine how another person might feel or think differently from themselves. This self-centered outlook limits their willingness to share and to apologize genuinely. Because of this egocentric tendency and lack of understanding of how various elements in their worlds are related, children in early middle childhood make many incorrect assumptions. They think trains have feelings, believe the moon travels along with them, and believe that work finished first is the easiest. They might estimate the weight of a ball of clay to be different when shaped into a sausage and truly think that other people see and feel what they see and feel.

But as a result of continuing experiences, formal instruction, and the expanding of their vocabularies and concepts, coupled with the maturation of the central nervous system, children between ages seven and eleven move into the next level of mental functioning. They are able to use a more coherent, integrated cognitive system in dealing with their worlds. They can classify, seriate, arrange into an hierarchy, perform numerical computations, conserve volume, and understand how another person could believe differently than they. They are consequently more cooperative in games and projects. They still may have problems with abstractions, such as "justice," or in solving word problems. They may use words in conversation that they do not really understand.

By age eleven, children should move into the stage of formal thinking used by adults. They are beginning to make hypotheses and test them, to realize over-all cause and effect, and to reflect and mentally survey varying possibilities. In fact, idealism becomes a pitfall for this age because they feel if something can be thought, it should be accomplished: world peace, perfect health, untold riches.

The ability to conceptualize grows steadily and continuously through the six- to twelve-year period. Gordon (1969) says guided experiences foster this growth. Concepts are cumulative, and new ones are welded to existing ones. Concepts are weighted with emotions: the concept "school" may have negative or positive connotations, as well as inherent definition. Concepts are usually maintained until they are amended or replaced by more convincing or satisfying ideas. Social pressure and intellectual maturity play a part in this process, too. Personality and sex may affect concept development, particularly with respect to social roles. Well-adjusted children are likely to have more realistic concepts than poorly adjusted children who live more in a world of fantasy. Guidance and mass media consumption impinge upon concept development (Williams & Stith, 1980).

A ready index to children's level of conceptualization is found in their humor. Not only is laughter essential for good mental health, but it also provides an escape from embarrassment. Humor may allow the child to momentarily appear more astute than the adult who falls for his/her joke. Humor offers opportunities to learn new words, particularly those with double meanings. Much humor in this age is off-color and related to sex and body functions. Punning jokes and riddles are popular in early middle childhood. Many times children do not really understand why what they have said is funny, but they know that it makes others laugh. They like jokes with a punch line. A sign of creativity is seen in the child who constructs original jokes. Sometimes mere substitution of a word will alter a standard punch line, but often the result is not funny at all. Children may not realize this and laugh anyway. Although joke comprehension increases with age, intelligence and interest in jokes are factors, too (Williams & Stith, 1980). Motivation is also a major determinant of the amount of enthusiasm for joking that a child will have. Children with good intelligence generally learn joke formation faster than those with slower mental powers.

REFERENCES

- Brainerd, C. J. Piaget's theory of intelligence. Englewood Cliffs: New Jersey: Prentice-Hall, 1979.
- Gordon, I. J. Human development from birth through adolescence. New York: Harper & Row, 1969.
- Williams J., & Stith, M. Middle childhood: behavior and development. New York: Macmillan, 1980.

LEARNING ACTIVITIES

1. Title: Joke Book

Description: Compile a booklet of middle childhood jokes. Interview the children and ask them to tell their favorite jokes. Classify the jokes according to the age of the child. Also note the reaction of the child as the joke is being told.

Materials Needed: Paper

2. Title: Discussion

Description: Think back to middle childhood days. Remember and discuss misconceptions one might have had. The misconceptions could have been about anything, but often children have misconceptions about people of other races, nationalities, sex, divorce, older people, and death. How was the misconception corrected?

Materials Needed: None

Reference: Adapted from Williams, J. W., & Stith, M. Middle childhood: behavior and development. New York: Macmillan, 1980.

4. VOCABULARY

1. Concepts--Thoughts and ideas.
2. Concrete--Things that can be seen and touched.
3. Abstract--Qualities or ideas that cannot be seen or touched.
4. Humor--Being able to recognize the comical or amusing.

EVALUATION

Title: Writing Assignment

Description: Write about one of these: (1) the role of humor in the life of a school-aged child; (b) faulty thinking of middle childhood; and (c) factors which affect concept development.

Materials Needed: Paper, pen

UNIT LEARNING ACTIVITIES (Growth and Development of the School-Aged Child)

1. Title: Stump the Teacher Game

Description: Ahead of time, students prepare questions. In class, students present the teacher with questions from the unit on the school-aged child. If the teacher does not know the answer he/she may bluff an answer. The student must tell the rest of the class if the teacher has given the correct answer or has invented an answer.

Materials Needed: None

Reference: Adapted from Bulletin Board and Game Ideas. Forecast for Home Economics, December 1975, p. 22.

2. Title: Child's Diary

Description: Pretend to be a child between the ages of five and twelve. On the first day of the unit, write an autobiography of your pretend self. Describe appearance, personality, friends, and family. Each day of the unit, take the last few minutes to make an entry in a diary. The entry should be what a child five to twelve years of age might write related to that day's lesson. Example: On the day the class discusses moral development, the entry might be about a friend cheating at school. When guidance is the subject for the class, the entry might be a reaction to discipline methods.

Materials Needed: Diaries (Notebooks could be used)

3. Title: Planning an Activity

Description: Divide the class into several groups. Each group will plan an activity or experience it believes to be beneficial to the growth and development of a school-aged child. It will have half of the class period to plan. The last half of class each group will present its activity to the class and explain what it feels the particular activity would do for the child. The activity or experience should be one in which the child and a parent, an older sibling, a teacher, or an older friend could participate. Examples include improving the child's self-concept, providing a nutritious menu, giving guidance in care of teeth, acting out safety practices, engaging in activity involving small muscles, large muscles, choosing games and activities to suit growth pattern, providing an opportunity for child to assume responsibility, etc.

Materials Needed: None

4. Title: Anecdotal Record

Description: At the beginning of the unit, each student will choose a school-aged child that he can observe everyday, to observe for the duration of the unit. At the end of the unit the student will summarize and analyze what he/she has learned about the child. Emphasize to the students that this is not an interview. The child should not be aware he/she is being observed. The student may get information through a conversation with the child:

1. A physical description of the child: age, physical characteristics, relationship to group, large and small muscle control, personal impression.
2. Behavior of the child in as many situations as possible, such as play, groups, friends, gangs, etc. (Note independence, emotions, manners.)
3. Child's behavior with peers.
4. Child's best friend.
5. Significant people with whom the child identifies.
6. Child's feelings about adults.
7. Attitude toward school, rules, teacher, classmates.

Evaluation--at the close of the unit the student will review observation anecdotes and write a report on the child. This should include identifying the influence of peer group, school and important others to the child and looking at Havighurst's developmental tasks for ages six to twelve years. The following questions should be answered: How does the child that you observed fit the development tasks of his/her age group? What is important to the child? With whom does he/she identify? If you were the parent of this child, what would you do or how would you feel?

Materials Needed: Small notebook, pen

5. Title: Political Campaign

Description: Begin with a brief discussion of heredity and environment. Divide the class into two groups. Give them the remainder of the class to come up with a platform that proves their candidate "heredity" or "environment" is a major influence on the school-aged child's growth and development. The campaign begins the next day. The campaign committee writes slogans and radio spots and makes posters outlining its candidate's platform. At the end of the week, set aside one-half of the period for the debate. Votes are cast, counted, and the winning candidate announced. Each student is then required to write a mock newspaper article announcing the winner and the platform he/she won on. The student should be required to search out the information that will support his/her candidate. The debate gives students a chance to hear both sides of the issue. Choose the best article and send it in to your school newspaper. This is an added incentive and a plus for home economics in public relations.

Materials Needed: Have sufficient research materials available in the classroom or plan a visit to the library. Poster board, crayons, felt markers

Reference: Adapted from Schlemmer, J. S. Teachers exchange. Forecast for Home Economics, November 1976, p. 12.

6. Title: Bulletin Board

Description: Plan and create a bulletin board that illustrates the caption--I Am Part of All That I Have Been.

Materials Needed: Will vary according to plan

Reference: Adapted from Kuykendall, P. S. Hayes selected bulletin boards for special projects. Wilkinsbury: Hayes School Publishing, 1967.

UNIT INSTRUCTIONAL AID

Title Holiday Bulletin Board

Description: Make a bulletin board appropriate for the season. Figure #70 depicts ideas for the four seasons. Write review questions on strips of paper and place in the baskets, stockings, etc., on the bulletin board. Give each student an opportunity to pick a question and answer it.

Materials Needed: Strips of paper with questions.
"Merry Christmas Quiz"--Green background, red felt stockings, tinsel to spell out caption and for a border

"Easy Easter Quiz"--Easter baskets made from decorated strawberry produce baskets, fat pipe cleaners for letters, sky blue background

"Trick or Treat Quiz"--Black background, heavy orange yarn for caption, decorated paper bags

"Be My Valentine"--Red check background, white paper bags decorated with children's valentines and bits of lace, red letters

UNIT EVALUATION

1. Title: Crossword Puzzle

Description: Complete "Middle Childhood Crossword Puzzle" (Student Handout #30).

KEY: Across

- 3. Family
- 5. Sports
- 8. Sibling
- 10. Developmental
- 13. Isolation
- 14. Puberty
- 15. Tooth

Down

- 1. Respiratory
- 2. Liked
- 4. Morality
- 6. Love
- 7. Same
- 9. Home
- 11. Control
- 12. Four

Materials Needed: Copies of puzzle

2. Title: Written Test

Description: The following test questions could be used to evaluate student knowledge.

Write "true" in the blank if the statement is true and "false" if the statement is not true.

- False 1. Misbehavior during the school-aged years is usually because of a lack of knowledge of what is right and wrong.
- False 2. In the laissez-faire type of guidance the child is not usually involved in decisions regarding behavior.
- True 3. During middle childhood the family is viewed more realistically than in preschool years.
- False 4. Concern over the potential impact of mass media on young people has appeared only within the last ten years.
- False 5. When children misbehave they should be required to apologize so they can develop a conscience.
- True 6. Overt expressions of love generally decline during the six through twelve age span.
- True 7. By the time a child begins school, curiosity level is usually high.
- False 8. Today in America the social roles of the sexes are more rigid than in any previous time in history.
- True 9. Food preferences are influenced by parents, siblings, peers, and advertising.
- True 10. School-aged children require less sleep than preschoolers or adolescents.

Read each statement, select the best ending, and write the letter in the blank.

- B 11. The most popular type of mass medium for school-aged children is:
- A. movies
 - B. television
 - C. comic books
 - D. radio
- D 12. A high self-concept is likely to be observed in a child:
- A. who is selfish
 - B. who does not enjoy group activities
 - C. who is dependent
 - D. none of the above
- D 13. Typical worries for school-aged children include:
- A. parental death
 - B. doing poorly in school
 - C. not being liked
 - D. all of the above
- A 14. Nutrition related problems that many American children have is:
- A. obesity
 - B. scurvy
 - C. night blindness
 - D. beriberi
- C 15. A method of guidance that emphasizes education and development of self-discipline is:
- A. authoritarian method
 - B. laissez-faire method
 - C. democratic method
 - D. none of the above
- D 16. Acceptance in the peer group depends on:
- A. experiences with the family
 - B. one's self-concept
 - C. the guidance style used in the home
 - D. all of the above
- B 17. Parents can help reduce sibling rivalry by:
- A. providing plenty of time for family activities
 - B. trying to build individual self-confidence of children
 - C. ignoring the rivalry
 - D. none of the above

C 18. The most common illnesses during middle childhood are:

- A. chicken pox and measles
- B. measles and mumps
- C. respiratory and gastrointestinal in nature
- D. none of the above

B 19. The basic attitude toward all learning is taught:

- A. at school
- B. in the home
- C. in day care centers and nursery schools
- D. none of the above

20. List the nine developmental tasks of the school-aged child as described by Havighurst.

1. *Learning physical skills necessary for ordinary games*
2. *Building a positive self-concept*
3. *Learning to get along with peers*
4. *Learning appropriate sex roles*
5. *Developing fundamental skills in reading, writing and calculating.*
6. *Developing concepts necessary for everyday living*
7. *Developing a conscience and a sense of values*
8. *Developing attitudes toward social groups and institutions*
9. *Achieving personal independence*

21. One method of guidance involves the use of natural consequences. Explain this technique.

In this method parents realize that much misbehavior has built-in penalties. If a child needs to be punished, the parents try to structure the penalties so they are related to the offenses. For example, breaking a toy in anger results in being without that toy for a period of time.

22. Describe the appearance of a healthy child.

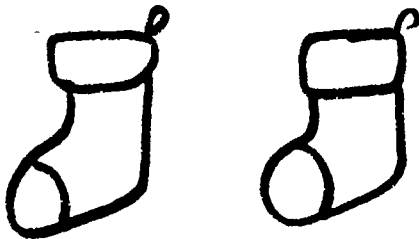
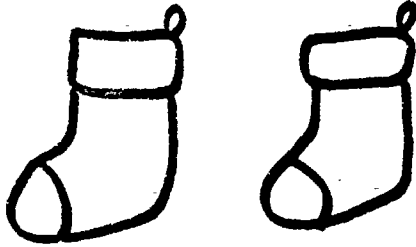
Pink mucous membranes, bright eyes, happy expression, rounded limbs due to sufficient subcutaneous fat, good muscle tone, erect posture, vigorous movements, energetic.

Materials Needed: Copies of quiz

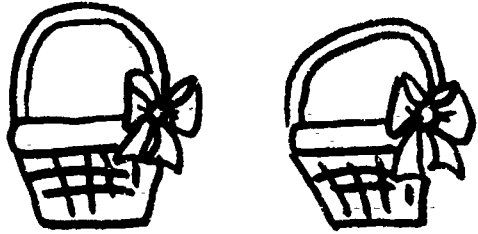
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Figure #70

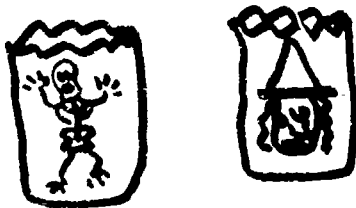
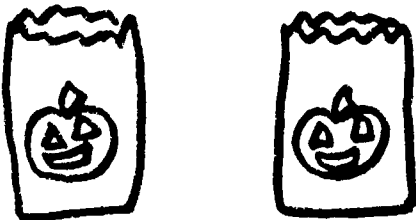
MERRY CHRISTMAS QUIZ



EASY EASTER QUIZ



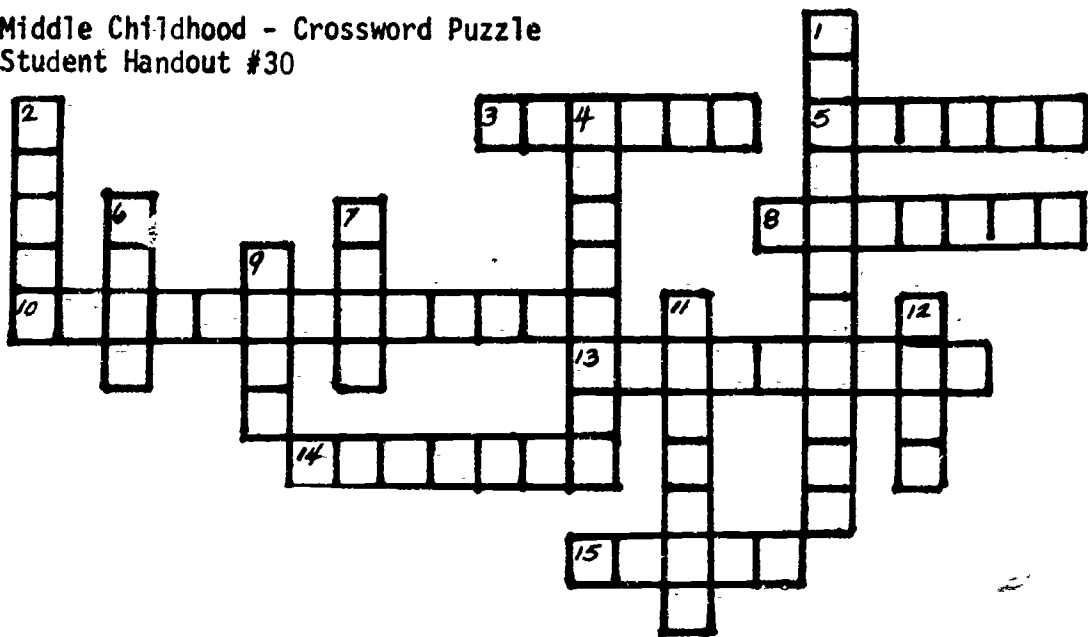
TRICK OR TREAT QUIZ



BE MY VALENTINE



Middle Childhood - Crossword Puzzle
 Student Handout #30



Across

3. During middle childhood, the _____ is viewed more realistically than during the preschool years.
5. In newspapers, school-aged children like the comics, the _____, advice columns, and puzzles and quizzes.
8. _____ rivalry refers to competition or conflict between brothers and sisters.
10. One of the _____ tasks of school-aged children is to build wholesome self-concepts.
13. _____ is a guidance technique that allows a child to regain emotional control.
14. Growth of the body during middle childhood is slow but steady until the onset of _____.
15. Nutrition related health problems of American children include obesity, hyperactivity, apathy, anemia, and _____ decay.

Down

1. During middle childhood the most frequent types of illnesses are _____ and gastro-intestinal in nature.
2. Typical worries during the middle childhood years are parental death, doing poorly in school, and not being _____.
4. _____ is behavior that is acceptable to a particular society.
6. Withdrawing _____ from a child is a psychologically damaging method of guidance.

Student Handout #30-Continued

Down

- 7 The span between ages seven to ten is usually a time when children want friends of the _____ sex and it is the "thing to do" to dislike the opposite sex.
9. When children's basic needs are being met at _____, they more readily benefit from programs offered by schools.
11. The middle childhood years are characterized by substantial gains in self-_____ and readiness to assume responsibility for actions.
12. The average sixth graders watch _____ hours of television daily on weekdays and six and one-half hours on Saturday and Sunday.

UNIT: Child Development Careers

CONCEPT: Decision-Making and Career Choice

GENERALIZATIONS

1. Vocational decision-making is an important developmental task of the adolescent.
2. Career decision-making involves self-awareness and career awareness.
3. Families, teachers, and peers influence career decisions.
4. Ideally, vocational choice is based on individuals' interests, needs, and competencies.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. Discuss briefly the importance of vocational decision-making.
2. Name two aspects of vocational decision-making.
3. List some factors that affect vocational choice.
4. Describe personality traits and skills that are desirable for a person who is interested in a child development career.

OUTLINE

- I. The Importance of Vocational Choice
- II. Factors Affecting Vocational Choice
 - A. Self-awareness and Career Awareness
 - B. Families, Teachers, and Peers
 - C. Stereotypes and Unrealistic Expectations
- III. Attitudes and Aptitudes Related to Child Development Careers

REVIEW OF SELECTED LITERATURE

Vocational choice and decision-making are listed by Havighurst (1972) as important developmental tasks of the adolescent. The decision concerning one's career choice is a major one, and a wise decision can lead to satisfaction, happiness, and a sense of well-being and accomplishment. The career decision will determine one's associates and, to

a great extent, one's scale or style of living (Jacoby, 1979; Lippeatt & Brown, 1965). Independence striving and emancipation from the family are motivating factors for vocational decision-making (Havighurst, 1972).

A career decision is not an easy decision for many adolescents. In past years, adolescents may have found the career decision-making process easier because of more rigid sex roles and structured social classes. Today's role changes and freedoms allow for more individuality and personal satisfaction, but also add to the difficulty of making a career decision with many adolescents haphazardly moving into jobs or professions (Jacoby, 1979).

Career decision-making involves two processes, self-awareness and career awareness. The individual should do some self-analysis and determine personal attitudes, interests, values, and skills. Then the adolescent should become aware of various careers. Many schools have an abundance of career information. Hobbies and volunteer work during the adolescent years can help the individual gain self-awareness, career awareness, and offer the "experience" that might be needed later when employment is sought (Jacoby, 1979). Wise vocational decision-making requires the same step-by-step process used in other types of decision-making.

The family's influence on vocational choice may be either positive or negative. Positive parental influences include (a) giving advice when it is requested, (b) serving as role models for career achievement, and (c) encouraging independent decision-making. Negative family influence may be unwanted parental advice. Young adolescents tend to follow parental advice more readily than older adolescents; family influence wanes after the adolescent is nineteen years old. Adolescents from higher socioeconomic groups are, as a whole, subject to greater family influences than those from the lower groups (Hurlock, 1972).

The influence of teachers in vocational selection is great among adolescents up to nineteen years of age. Although peers have some influence, it is less than that of teachers or families in early adolescence. It increases somewhat in late adolescence. The content of different school subjects, grades and academic success, and extra curricular activities of the school influences vocational aspirations (Hurlock, 1972).

Stereotypes of people in various occupations may have a profound influence on the adolescent's attitudes toward a particular occupation. In a similar way, glamour and prestige that are associated with various occupations may influence the adolescent's vocational choice. Lack of realism is sometimes shown in both occupational choice and consideration of job opportunities. Many adolescents of limited ability become interested in occupations in which they cannot possibly succeed. By the end of adolescence, many young people mature in that they show increasing wisdom in their vocational preferences and decreasing fantasies. Vocational choices are ideally based on individual's interests, needs, and competencies rather than on variables that are less stable (Hurlock, 1972).

In making a vocational choice the adolescent may want to consider a challenging and rewarding career in child development. Few, if any, areas of home economics are developing faster than careers in child development and family (Quigley, 1974). Personality traits of someone suited to a child development career might include friendliness, warmth, cheerfulness, sympathy, flexibility, enthusiasm, initiative, imagination and creativity, and self-confidence. Other personal qualities include reliability, punctuality, and a professional attitude.

The worker in the child development area needs a knowledge of children's behavior and development as well as knowledge required by the specific job. This individual also needs the ability to communicate with others, the ability to manage time well, and the ability to make children feel comfortable (Ames, 1979; Quigley, 1974).

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- Hurlock, E. B. Child development. New York: McGraw-Hill, 1972.
- Jacoby, G. P. Preparing for a home economics career. New York: McGraw-Hill, 1979.
- Lippeatt, S. F., & Brown, H. I. Focus and promise of home economics: A family-oriented perspective. New York: Macmillan, 1965.
- Quigley, E. E. Introduction to home economics. New York: Macmillan 1974.

LEARNING ACTIVITIES

1. Title: Interviews

Description: Before this lesson interview two or three people about their vocational decisions. The "Interview Form" (Student Handout #31) could be used, or student could develop their own questions.

Materials Needed: Copies of interview questions.

2. Title: Writing Assignment

Description: (A) List experiences (past and/or possible future) through which one can become aware of personal interests in child-care careers. Examples: baby-sitting, nursery worker, teacher's

helper. (B) List characteristics and interests a person who is considering a child development career should possess. Identify with a star the characteristics that you possess.

Materials Needed: Paper, pen

3. Title: Collecting Quotes

Description: Collect quotes and cartoons about work. Select one or two that express your feelings and write a short description of the attitude expressed.

Materials Needed: Book of quotes

4. Title: Interview

Description: Contact a person who works with children (nursery school or kindergarten teacher, day care worker, child development specialist, Sunday school teacher, baby-sitter, etc.). Interview the person, asking the following three questions:

1. Why did you choose your child-development job or career?
2. What characteristics do you feel a professional in child-development should possess?
3. What benefits have you gained from working with children?

Discuss findings during the next class period.

Materials Needed: None

INSTRUCTIONAL AID

Title: Flip Chart

Description: A series of pictures entitled "Families" (Figure #71), "Sex Differences and Stereotypes" (Figure #72), "Teachers" (Figure #73), "Too Little Information" (Figure #74), and "Glamour and Prestige" (Figure #75) could be used to make a flip chart on factors affecting vocational choice.

Materials Needed: Flip chart, markers

EVALUATION

Title: Written Test

Description: Answer the following questions.

1. Why is a vocational decision so important for adolescents?

A wise decision can lead to satisfaction and a sense of accomplishment. One career decision will determine one's

→
associates and one's style of living. A vocational decision usually indicates emancipation from the family.

2. Name the two processes involved in vocational decision-making.

Self-awareness and career awareness.

3. Name three positive parental influences on career choice.

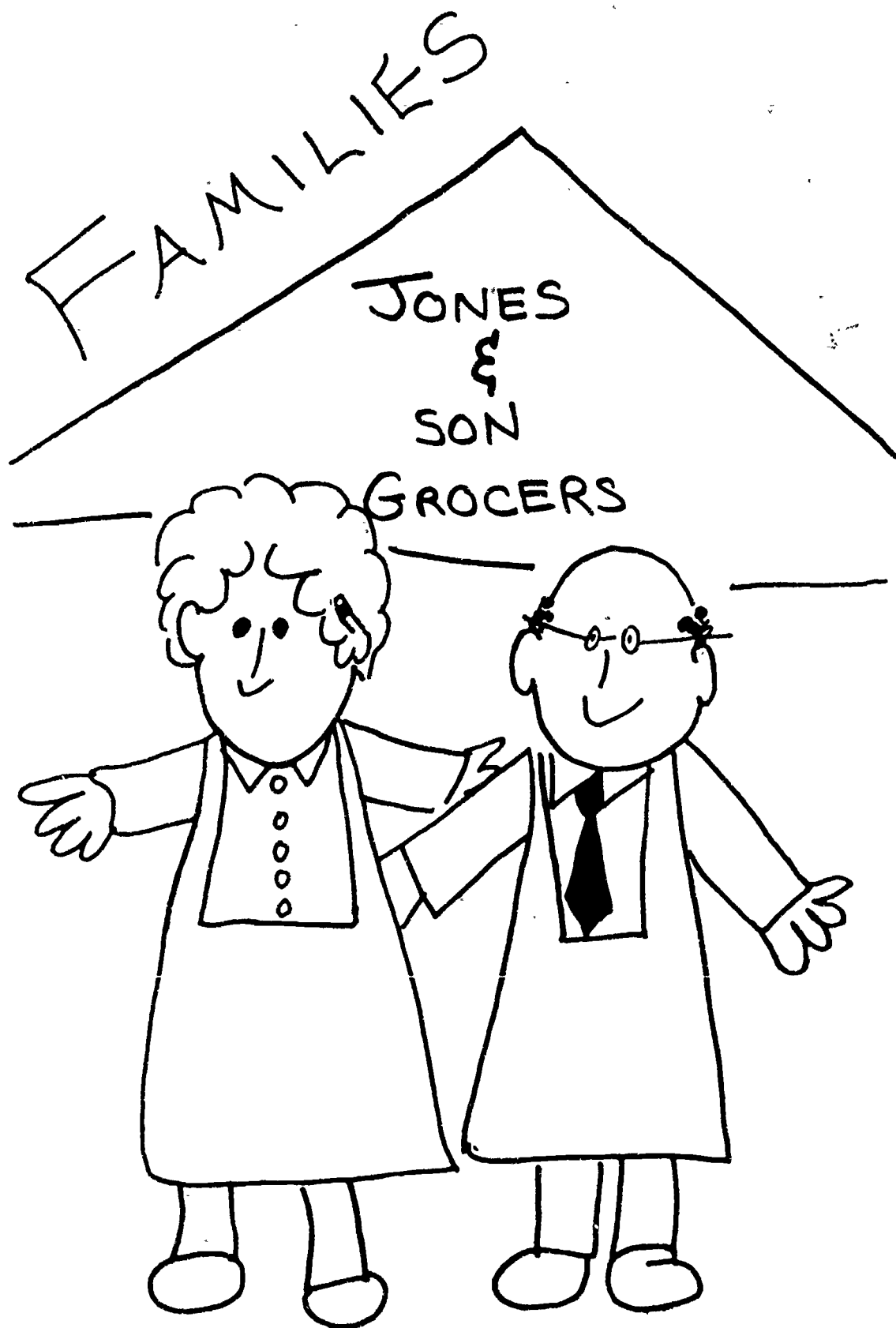
Giving advice, serving as role models, and encouraging independent decision-making.

4. Name five personal qualities that someone suited to a child development career should possess. Explain why you think these qualities are important for someone working with children.

Answers will vary. Accept any students' responses that indicate thought and knowledge of the subject.

Materials Needed: Copies of questions

Figure #71



503

560

Figure #72

SEX DIFFERENCES AND

STEREOTYPES

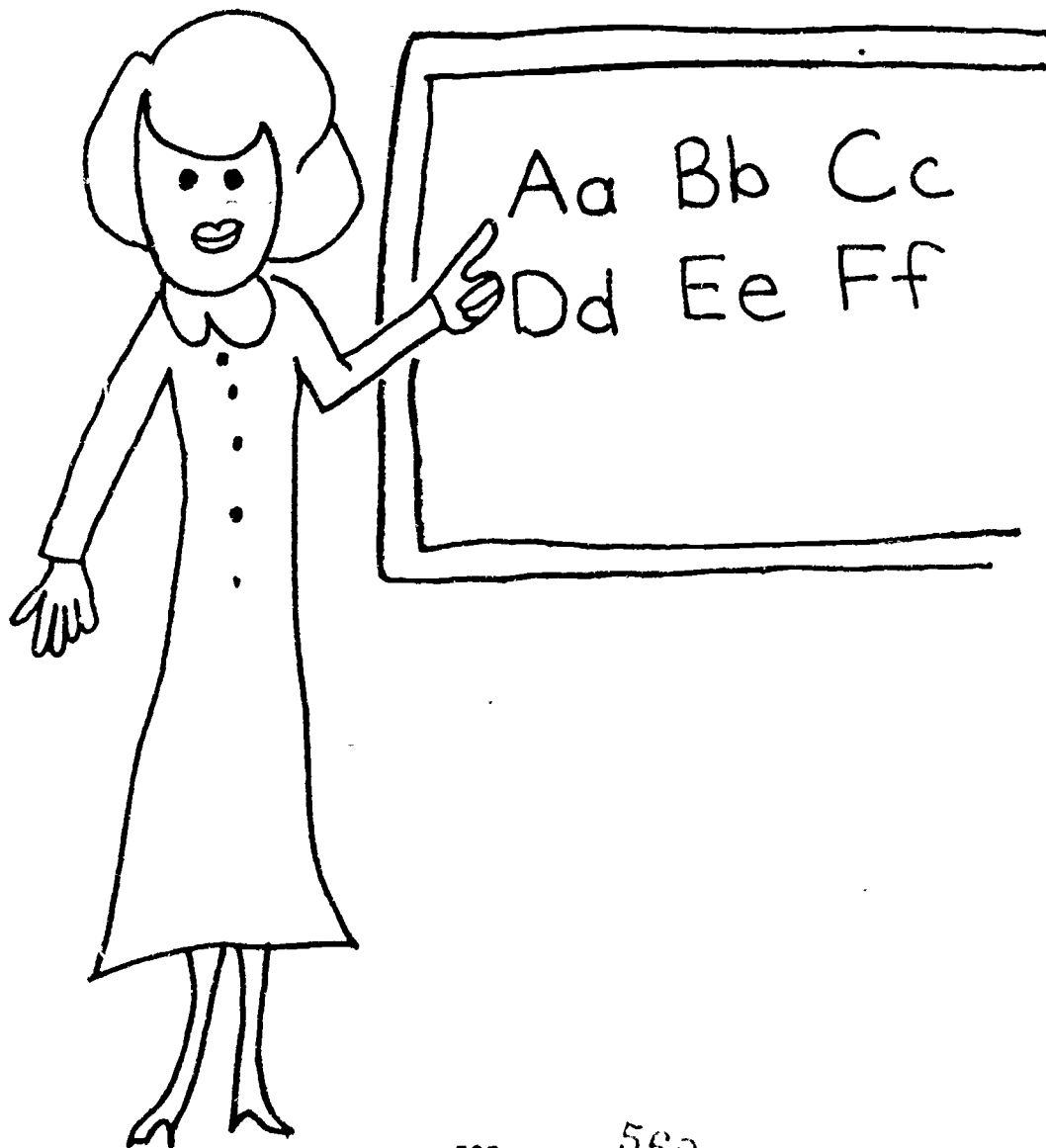


504

561

Figure #73

TEACHERS



505

562

Figure #74

TOO LITTLE INFORMATION



506

563

GLAMOUR

STARRING
JANE F. SMITH
PRESTIGE

Interview Form
Student Handout #31

Name _____

Date _____

1. Name of person being interviewed:

Sex:

Age:

Educational background:

Previous experiences:

2. Briefly describe the career:

3. Describe how these factors affected career choice:

A. Family influence--

B. Influence of a teacher--

C. Too little information about jobs--

D. Glamour, prestige--

E. Stereotyping--

4. List other factors that might have affected career choice:

5. Was the choice a satisfactory one?

508

UNIT: Child Development Careers

CONCEPT: Professional Opportunities in Child Development

GENERALIZATIONS

1. A career in child development has many advantages, including job satisfaction, job availability, pleasant work environment, and flexible work schedules.
2. There is a need for paraprofessionals and professionals in child development careers.
3. A child development career can be in the field of education; day care; mass media; retail and merchandising; child welfare, health, and safety; or research.
4. Professionals in related fields can benefit from a strong background in child development.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List some major advantages of a child development career.
2. Explain the difference between a paraprofessional job and a professional career.
3. Describe some career opportunities that are available for the child development specialist.

OUTLINE

- I. Advantages of a Career in Child Development
- II. Professional Opportunities in Child Development
 - A. Education
 - B. Day Care
 - C. Media
 - D. Retail and Merchandising
 - E. Child Welfare, Health, and Safety
 - F. Research
- III. Related Occupations

REVIEW OF SELECTED LITERATURE

There are many reasons for selecting a child development career; probably the major reason is the enjoyment of working with young people. Most child development specialists feel that children are the world's most promising group of people. They experience great personal pride and satisfaction in watching children grow and develop. There may be even more satisfaction for those people who are able to help mentally or physically limited children (Jacoby, 1979).

Since there are over seventeen million preschool children in the United States, with approximately six million preschool children who have mothers that work outside the home, there are many job opportunities available in every area of the country (Census Report, 1970; Early Childhood Education, 1977; Jacoby, 1979). For most child development jobs, the working conditions are usually pleasant, cheerful, and healthful. Many work schedules include opportunities for full-time and part-time work.

Child development opportunities are available at all levels of responsibility. Child-care paraprofessionals receive less training than professionals; many receive on-the-job training. They work under the close supervision of the professionals (Jacoby, 1979). Many child-care careers offer opportunities for commitment and satisfaction on the professional level. The professional makes a commitment that involves loyalty, self-discipline, self-motivation, and dedication. Professional level positions require a bachelor's degree with specialization in child development, early childhood education, child psychology, or a related field. Graduate work is done by many professionals (Parker, 1980).

The many child development careers are closely related, but they can be divided into several categories. These categories include education; day care; media; retail and merchandising; child welfare, health, and safety; and research.

Educational child development career opportunities include nursery school and kindergarten teaching in public and private situations; positions such as nursery school director and curriculum specialist; and positions in programs for gifted children, handicapped children, or infants. There are also positions for college level teachers in child development and family life education. Early childhood education will probably continue to grow as long as research indicated that learning which occurs between birth and five years may have a critical influence on an individual's capacity to learn throughout life (Early Childhood Education, 1977).

A nursery school teacher strives to develop the learning skills, psychomotor skills, and social interaction skills of children. The nursery school should be the type of environment where children can learn creatively and constructively, and it is the responsibility of the teacher to develop this climate for learning. The nursery school teacher works with parents, as well as children, and sometimes with college students if the school is a laboratory situation (Parker, 1980).

Closely related to education careers are day-care careers. There are opportunities for professional and paraprofessional positions as more and more day care centers open. Parent co-ops, church affiliated centers, industrial centers, and groups such as shopping centers and campus organizations are seeking directors, coordinators, teachers, and aides. In most states, day care centers have to be licensed, thus there are careers to be found in licensing. Good child-care programs do more than keep the child safe and take care of physical needs. They provide for the best possible development of the child and strive to improve the child-rearing skills of the parents (Jacoby, 1979).

Educational requirements are usually very strict for day-care centers supported by public funds. Particular requirements for private facilities will vary. Professional level positions require a college degree. Paraprofessional jobs generally require a high school diploma, with many centers preferring employees with a two year college degree (Early Childhood Education, 1977).

There are some child-care positions in private homes such as infant nurse, nursemaid, governess, and baby-sitter. An infant nurse or nursemaid cares for children, giving them their baths, feeding them, supervising their play, etc. A baby-sitter performs any or all of the same duties as nursemaid but usually on a daily or hourly basis rather than on a full-time basis. A governess meets the personal needs of the children and supervises the recreation, diet, and health of children according to the parents' instructions. No particular formal educational requirements are required for these positions. Employers usually seek workers who are agreeable, discreet, trustworthy, neat, clean, and in good health (Hopke, 1978).

For the person who is interested in children and who is also creative, there are positions in the media. Positions in television and radio might include programmer, consultant, writer, even performer for children's shows or programs for parents. Creative people are also needed for writing, illustrating, and promoting children's books and magazines.

There are also careers for the person who is interested in children and business. The retail and merchandising world of children's clothes, furniture, and toys is a thriving business, with positions as consultants, buyers, designers, and salespeople available.

There are many positions and opportunities for those interested in child welfare, health, and safety. In 1979, there were about 430,000 paraprofessional and professional social workers employed in the United States (Social Work, 1979). More and more companies are providing free counseling services to their employees to help resolve problems associated with families, mental health, and alcohol and drug dependency. Industries may become an important resource for new jobs for people with an interest in children and families. Workers are already needed in child abuse programs, state adoption and foster care programs, and juvenile and divorce courts.

People with home economics training are well suited to a career in this area, although some jobs require a degree in social work. There is a demand for paraprofessionals and professionals to help parents who are unable to cope with the pressures of parenting. A telephone "hot line" representative is one example. This person has to be able to provide quick assistance, often at times of serious crisis. A visiting parent aide visits homes, observes, provides advice, and often teaches specific skills that a family needs in order to function more effectively. A parent counselor works directly with a problem parent to help that parent identify crisis-causing factors. The parent can also learn communication skills and conflict coping behaviors from the counselor. A parenting educator conducts classes for parents who want more information about children and their behavior (New Careers in Child Care, 1979).

Recent research has also indicated a need for the child development specialist in such areas as welfare reform, population planning, research projects, camps, settlement houses, correctional institutions, children's hospitals, and youth organizations (Parker, 1980). Many youth groups such as Scouts, Boys or Girls Clubs, and church organizations have professional staffs and are seeking people with training and experience in child development. Some of the positions include program planner, publications specialist, funding specialist, and administrator. The headquarters of the largest groups are in New York, Chicago, and Washington, D.C., but there are regional and local offices located throughout the country (Careers for the Future, 1980).

There are also some career opportunities for the child development specialist in the area of research. Some projects that are being investigated include structure and functions of families, family planning, needs of teenage parents, violence in the family, and the effects of television on children (Parker, 1980).

There are many professionals who do not have a degree in child development but who would greatly benefit from a strong background in the subject. Psychiatrists, psychologists, pediatricians, nurses, teachers, lawyers, judges, and clergymen would benefit from an understanding of child development.

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- Early childhood education: A fast-growing career field. Forecast for Home Economics, March 1977, p. 40.
- Hopke, W. E. (Ed.). The encyclopedia of careers and vocational choice (Vol. 2). Chicago: J. G. Ferguson, 1978.

Jacoby, G. P. Preparing for a home economics career. New York: McGraw-Hill, 1979.

New careers in child care: Parenting partners. Forecast for Home Economics, November 1979, p. 57.

Parker, F. J. Home economics--An introduction to a dynamic profession. New York: Macmillan, 1980.

Social work: Service to others for an improved quality of life. Forecast for Home Economics, April 1979, p. 39.

LEARNING ACTIVITIES

1. Title: Panel

Description: Invite a panel of people who work in child-development occupations to speak on their responsibilities. Videotape the panel discussion for later use.

Materials Needed: Letters confirming time and date, thank you letters, video equipment

2. Title: Student Research

Description: Using the Dictionary of Occupational Titles, identify the responsibilities for these occupations:

1. Baby-sitter
2. Recreation Aide
3. Adoption Agency Children's Aide
4. Salesperson, Children's Wear
5. Cottage Parent
6. Family Day Care Provider
7. Foster Parent
8. Nursery School Teacher
9. Child Day Care Center Program Director
10. Child Day Care Supervisor

Materials Needed: Dictionary of Occupational Titles (4th Ed.). Washington, D.C.: United States Government Printing Office, 1977

3. Title: Flannel Board

Description: Use Figure #76 entitled "Step Right Up" to construct a flannel board display. As each group of professional opportunities is discussed, add to the flannel board.

Materials Needed: Flannel board, construction paper, markers

4. VOCABULARY

1. Profession--A career requiring specialized knowledge, intensive academic preparation, and usually, life-long dedication.
2. Paraprofessional--A person who assists a professional person.

INSTRUCTIONAL AID

Title: Filmstrip and Cassette Kit

Description: McGraw-Hill Films has produced a series of filmstrips and cassette tapes on "Careers in Home Economics." The filmstrip on "Careers in Child Care" shows the role of professionals and paraprofessionals, the importance of understanding children, and changing attitudes toward children as well as career information. The filmstrip consists of interviews with a cooperative extension specialist in family day care, a college lecturer, an account supervisor with an advertising agency, and a director of an occupational home economics program.

Materials Needed: "Careers in Home Economics" Kit

Source: Available from McGraw-Hill Films, 1221 Avenue of the Americas, New York, New York 10020.

EVALUATION

Title: Retirement Speech

Description: Choose a child development career and write a retirement speech. Include how the career has benefited you.

Materials Needed: Paper, pen

Research

Child Welfare, Health, and Safety

Retail and Merchandising

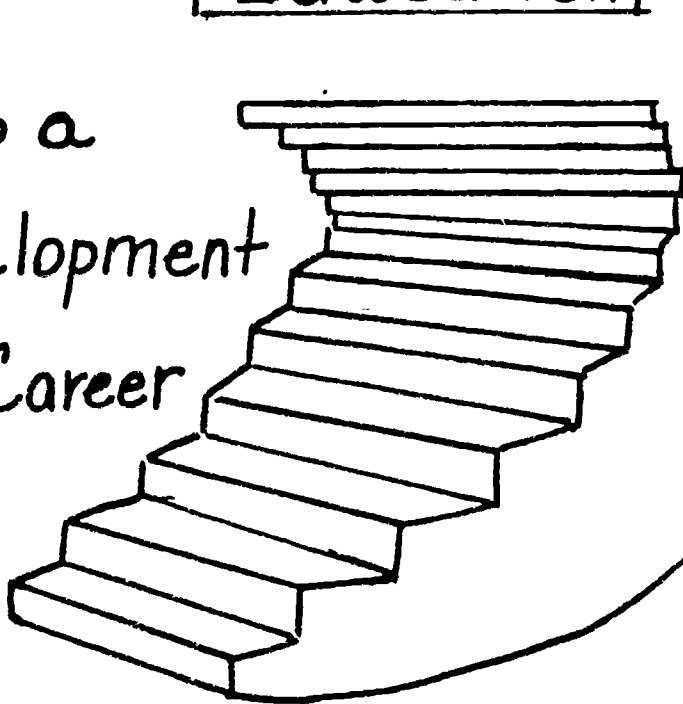
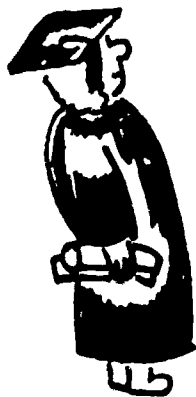
Media

Day Care

Education

**Step
Right
Up** - To a
Child Development

Career



UNIT: Child Development Careers

Concept: Job Search Skills

GENERALIZATIONS

Basic job search skills include knowing where to look for job opportunities, being able to write a resume and complete job application forms correctly, and being able to participate successfully in an interview situation.

PERFORMANCE OBJECTIVES

Upon completion of the lesson, the student should be able to:

1. List sources of assistance in locating jobs.
2. Write a resume.
3. Complete an application form correctly.
4. Display appropriate behavior for an interview situation.

OUTLINE

- I. Locating Job Opportunities
 - A. Unions and Organizations
 - B. Civil Service
 - C. Employment Agencies
 - D. Classified Advertising
 - E. Walk-in Visits
 - F. Family and Friends
 - G. School Placement Services
- II. Writing a Resume
- III. Completing a Job Application
- IV. Participating in a Job Interview

REVIEW OF SELECTED LITERATURE

In order to locate a satisfactory career position, the adolescent or young adult should have basic job search skills. The skills include knowing where to look for job opportunities, being able to write a resume and complete application forms correctly, and being able to participate successfully in an interview situation.

During times of a healthy economy, businesses are probably hiring more people. When there is a recession, jobs are harder to find. It is important for individuals to know where to look for positions. Professional organizations, unions, and trade associations can often help young people find jobs since they are in contact with employers and are often aware of new openings or training programs. These organizations will usually try to convince the individual of the advantages of membership in their group. Some nonprofit organizations such as the YWCA and YMCA have staff members who can counsel adolescents on occupational matters (Jacoby, 1979).

According to Jacoby (1979) one in every five people employed in the United States works for federal, state, or local governments, so an important place to look for jobs is in civil service. Many of the positions are related to home economics. Each federal civil service office conducts examinations, sends names of qualified people to federal agencies that are seeking new workers, and provides its Federal Job Information Center. To locate the closest office, the individual should look in the telephone directory under U.S. Civil Service Commission. State employment agencies are probably the best source of information about state civil service positions.

Since many large businesses prefer to find job candidates through an agency, it may be wise for the job seeker to register with one or more reliable employment agencies. These agencies give the applicant background information on the policies of companies and requirements of particular openings (Brown, 1976). Sometimes individuals will be sent to apply for a job as soon as they register with the agency; if there are no positions open, the job seeker will be put on a reference list for future openings.

Employment agencies can be public or private. State employment agencies are part of the U.S. Employment Service. These agencies are supported by tax money and services are free to workers and employers. Private employment agencies operate much like public agencies, except fees are paid by the employers or the workers. The individual should clearly understand who pays the fee and the amount of the fee before signing any contract (Jacoby, 1979).

Reading the classified advertisements--the "Help Wanted" section--can alert the job seeker to available positions. These ads in local newspapers are especially beneficial for a person looking for an entry-level job. Specialized business newspapers, magazines, and journals, such as The Wall Street Journal and AHEA Action, have classified ads for professional positions (Brown, 1976; Jacoby, 1979).

Many people also get jobs by applying directly at local businesses, while others learn about job openings from family, friends, and neighbors. Counselors, school placement personnel, and teachers are interested in helping adolescents find satisfying jobs (Jacoby, 1979). The home economics teacher may be especially helpful in locating entry-level and para-professional positions in child care.

An individual who is actively seeking a job will often need a resume. A resume is useful to leave in a school placement office, with an employment agency, with a friend who might help locate a job, and to take on interviews to be left with a prospective employer. A resume is a brief summary of job qualifications. The resume should include a heading with name, address, and telephone number, a list of occupational goals and interests, a list of work experiences, a description of educational background, and a list of any honors or awards. The list of work experience should include specific job titles, company names and addresses, dates employed, and exact job responsibilities. The list should be in order starting with the most recent. The list of educational degrees should begin with the highest degree earned. Details such as dates, area of specialization, and names and addresses of schools should be given. If an individual has been a member of such organizations as FHA/HERO, this should be mentioned because membership activities in such groups indicate cooperation, commitment to service, and leadership ability (Brown, 1976; Jacoby, 1979).

The resume should also include a list of any job related skills the individual might have. Skills in areas such as typing, bookkeeping, operating machinery, photography, a second language, or art may not be the major need for a position, but can influence an employer's decision (Brown, 1976; Jacoby, 1979).

References--people whom an employer can contact for more information about a job seeker--can be listed in various ways, but there should be some mention of references on a resume. It is appropriate to state that references are available upon request, or references are available from a placement office, or to list the names and addresses of teachers and/or principal, especially a vocational teacher; guidance counselor; or former employers. Permission should be obtained before giving a person's name as a reference (Brown, 1976).

Personal data such as date of birth and marital status are optional on a resume. Race, religion, facts about separation or divorce, photographs, hobbies, reasons for leaving previous jobs, and a description of personality traits are usually not given on a resume. The individual might want to indicate a willingness to relocate if it is appropriate.

For nearly all jobs, an individual will have to complete an application form. These forms ask for the same kinds of information as given in a resume. The forms should be filled in neatly, accurately, and completely (Jacoby, 1979).

After an employer has seen a resume or an application form, a job interview is the next step. The interview gives the employer the

opportunity to judge the job seeker's appearance and manners, personal qualities, and job interest. The job seeker also has the opportunity to get more information about the job and gain some knowledge of the employer.

Suggestions given by Jacoby (1979) and Brown (1976) for interviews are given below:

1. Know the pronunciation of the employer's and company's name.
2. Dress attractively and businesslike.
3. Avoid chewing gum.
4. Avoid slang expressions.
5. Answer all questions, but don't ramble.
6. Let the employer control the interview.
7. Have any necessary papers arranged for easy reference.
8. Express poise and self-confidence.
9. Don't criticize former employers.
10. Be on time for an interview.
11. Ask questions about the job, but don't ask for an instant hiring decision.
12. When the interview is over, thank the employer and leave promptly.

REFERENCES

- Brown, M. A. S. Gearing up for getting a job. Forecast for Home Economics, September 1976, pp. 120-123.
- Jacoby, G. P. Preparing for a home economics career. New York: McGraw-Hill, 1979.

LEARNING ACTIVITIES

1. Title: Field Trip

Description: Visit an employment agency. Find out how the agency works, what kind of services they provide, and what kind of questions they ask job seekers. Also find out how successful they are at placing the job seekers.

Arrangements: Make arrangements with the agency and the principal; arrange for transportation and permission slips

2. Title: Survey

Description: Survey informally as many people as possible to determine methods used locally to find jobs. Report to class.

Materials Needed: None

3. Title: Writing Assignment

Description: Write an accurate resume that could be used if applying for a job.

Materials Needed: Paper, pen (may be required to be typed, if desired)

4. Title: Application Form Comparison

Description: Collect job application forms from various local businesses. Compare the information requested on these.

Materials Needed: Job application forms

5. Title: Roleplay

Description: Roleplay interview situations. Show appropriate and inappropriate behavior. Videotape if possible.

Materials Needed: None except videotaping equipment if used

6. Title: Posters

Description: Develop a series of posters that illustrate appropriate behavior during interviews. Display in the school building for other students to see.

Materials Needed: Poster paper, markers

7. Title: Style Show

Description: Present a mini-style show with clothes that would be appropriate for interviews.

Arrangements and Materials Needed: Appropriate clothing; make arrangements with a couple of students to model

8. Title: Panel

Description: Invite several people who employ child care workers to speak on how they locate prospective employees, what they look for on a resume, and characteristics they find important during an interview.

Materials Needed: Letters confirming time and date, thank you letters

INSTRUCTIONAL AID

Title: Bulletin Board

Description: Develop a bulletin board of classified ads from newspapers and professional publications that relate to child development.

In a dictionary, look up any abbreviations that are unfamiliar. Add the explanations of these abbreviations to the bulletin board.

Materials Needed: Background material, dictionary, construction paper, markers, ads

EVALUATION

Title: Pretest

Description: To determine job search skills that students already have, answer these questions.

1. How could professional organizations, unions, and trade associations help younger people find jobs?

They are in contact with employers and are often aware of new openings or training programs.

2. Other than through professional organizations and unions, name ways younger people can locate job openings.

Applying at a Civil Service office, registering with an employment agency, reading classified ads, applying directly to local businesses, talking with family and friends, registering with any school placement services.

3. What are the two kinds of employment agencies?

Public and private.

4. Define "resume."

A brief summary of job qualifications.

5. From the following list, check the information that is appropriate for a resume.

- A. Description of educational background.
- B. List of hobbies.
- C. Information on race and religion.
- D. List of any job related skills.
- E. Some mention of references.
- F. List of work experience.

6. What is the purpose of a job interview?

The interview gives the employer the opportunity to evaluate the job seeker's appearance, manners, personal qualities, and job interest. The job seeker has the chance to get more information about the job, see the work environment, and gain some knowledge of the employer.

Materials Needed: Copies of questions

UNIT LEARNING ACTIVITIES (Child Development Careers)

1. Title: Matching Game

Description: Make a board from poster paper; use strips of construction paper to make three rows of pockets. Make 18 cards, put numbers on one side. On the other side, write either a question or an answer. Put these on the board with the numbered side showing. The object is to choose numbers that match the question with the correct answer. An entire class, a small group, or two students can play. The students could also make up the questions and answers. The student with the most correct matches wins.

Sample questions and answers:

1. Name the two processes involved in career decision-making.
2. List three ways in which parents can have a positive influence on their children's vocational choice.
3. A. Education, B. Day Care, C. Retail and Merchandising, D. Research
4. Name a few personality traits of someone suited to a child development career.
5. Name some advantages of a career in child development.
6. Give them in order starting with the most recent.
7. List four of the six areas of professional opportunities in child development.
8. A. Job satisfaction, B. Job availability, C. Pleasant working conditions, D. Flexible working schedules
9. A. Friendliness, B. Creativity, C. Enthusiasm, D. Reliability
10. Name four sources of assistance in locating job openings.
11. What are the two kinds of employment agencies?
12. A. Civil Service Office, B. School counselor or placement service, C. Classified advertising, D. Employment agencies
13. A. Self-awareness, and B. Career awareness
14. A brief summary of one's job qualifications.
15. A. Giving advice when requested, B. Serving as role models, C. Encouraging independent decision-making
16. Define "resume."

17. In what order should previous work experiences be listed in a resume?

18. A. Public

Key: 1-13 6-17
 2-15 10-12
 3-7 11-18
 4-9 14-16
 5-8

Materials Needed: Poster paper, construction paper, tape or glue, markers

2. Title: Writing Assignment

Description: List "A Dozen Ways To Keep a Job." This individual assignment will be discussed in class. Some examples are being on time, getting plenty of rest, not abusing sick leave time, and being efficient.

Materials Needed: Paper, pen

3. Title: Guest Speaker

Description: Invite the school guidance counselor to explain the general employment outlook for the local area.

Materials Needed: Letter confirming time and date, thank you letter

4. Title: Research Assignment

Description: Select a career in child development. Determine the job responsibilities, approximate salary, educational requirements, and job availability. If possible, interview a person in the chosen career. Write a summary of the information.

Materials Needed: Access to library facilities

5. Title: List of Agencies

Description: Since volunteer work can often lead to a career, compile a list of names and addresses of local agencies who are looking for volunteer help. Post this list for students who might be interested.

Materials Needed: Paper, pen

UNIT INSTRUCTIONAL AIDS

1. Title: Bulletin Board

Description: Use bulletin board display entitled "Catch a Child

Development Career" (Figure #77). On the fish, allow the students to place the names of the various child development careers.

Materials Needed: Background, construction paper, markers

2. Title: Bulletin Board

Description: Use a real newspaper, real hair ribbons, and shoe laces on "What's Available in Child Development Careers" (Figure #78) bulletin board.

Materials Needed: Background, construction paper, want ad section of newspaper, shoe laces, ribbons, letters

3. Title: Bulletin Board

Description: To emphasize the importance of exploring various occupations and exploring one's own interests, use the bulletin board entitled "Career Decisions" (Figure #79).

Materials Needed: Background, two boxes, construction paper, letters

UNIT EVALUATION

Title: Written Test

Description: The following questions may be used for a written evaluation.

Write "true" if the statement is true or "false" if the statement is not true.

- true 1. The demand for child-care facilities is increasing.
- false 2. The family's influence on vocational choice is always positive.
- false 3. An individual must have a college degree in order to pursue a career in child care.
- false 4. To work with children you should always be serious and never be a "ham."
- true 5. Vocational choice may be more difficult for today's adolescents because of changes in sex-roles.
- false 6. Older adolescents tend to follow parental advice more readily than younger adolescents.
- false 7. Paraprofessionals receive more training than professionals.

- false 8. Although Civil Service employs many Americans, it does not have any positions related to home economics.
- true 9. State employment agencies are supported by tax money, thus they do not charge the worker or employer.
- true 10. On a resume, the list of work experiences should be in order starting with the most recent.

Write the letter of the correct answer in the blank.

- D 1. Positive parental influence on vocational choice includes
- A. encouraging independent decision-making
 - B. serving as role models for career achievement
 - C. giving advice when it is requested
 - D. all of the above
- B 2. Educational child development career opportunities include
- A. performer in a children's television program
 - B. nursery school teacher
 - C. designer of children's clothes
 - D. social worker with an adoption agency
- C 3. A person who cares for children on a daily or hourly basis is usually referred to as a
- A. nursemaid
 - B. nursery school teacher
 - C. babysitter
 - D. none of the above
- A 4. Career opportunities related to children in merchandising include
- A. designing toys
 - B. writing children's books
 - C. counseling in a child abuse center
 - D. teaching nursery school
- C 5. A person who conducts classes for parents who want more information about children is called a
- A. visiting parent aide
 - B. parent counselor
 - C. parenting educator
 - D. parents' "hot line" representative

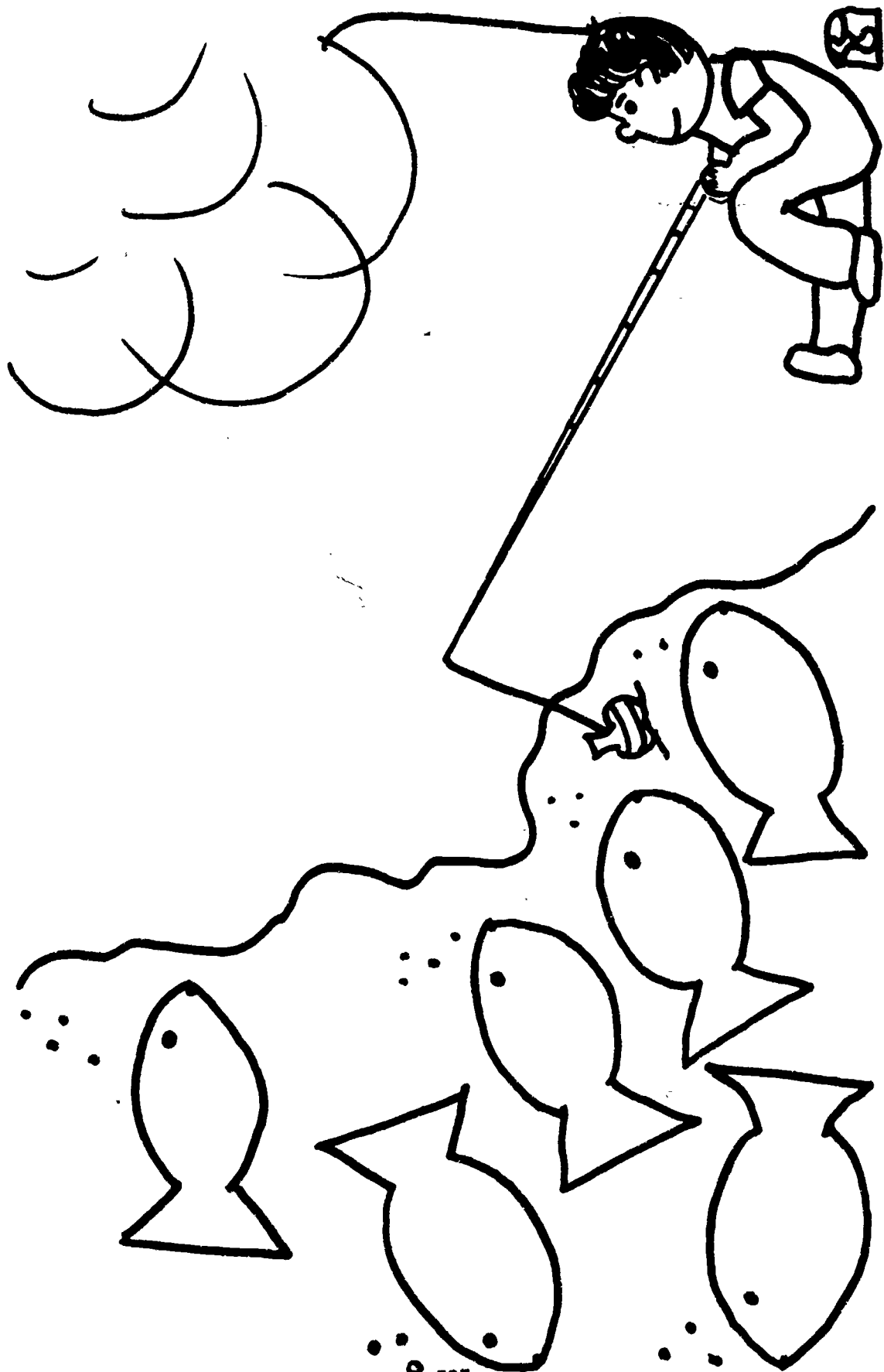
B 6. Information that should not be included on a resume includes

- A. job seeker's address
- B. job seeker's race and religion
- C. list of work experiences
- D. description of educational background

D 7. In mentioning references on a resume, it is appropriate to

- A. state "available upon request"
- B. state "available from school placement office"
- C. list the names and addresses of references
- D. all of the above

Figure #77



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Figure #78

WHAT'S AVAILABLE IN CHILD DEVELOPMENT CAREERS?

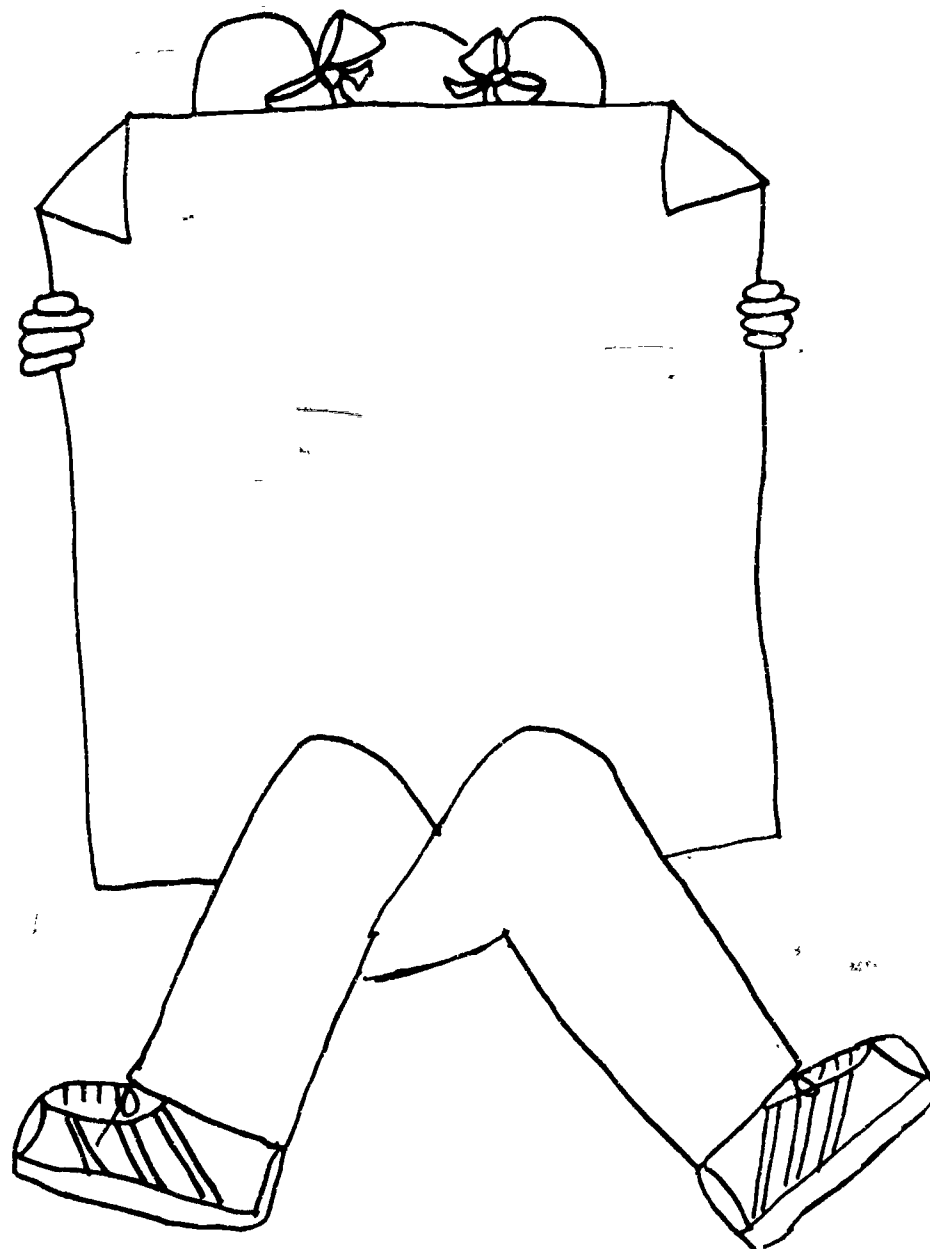
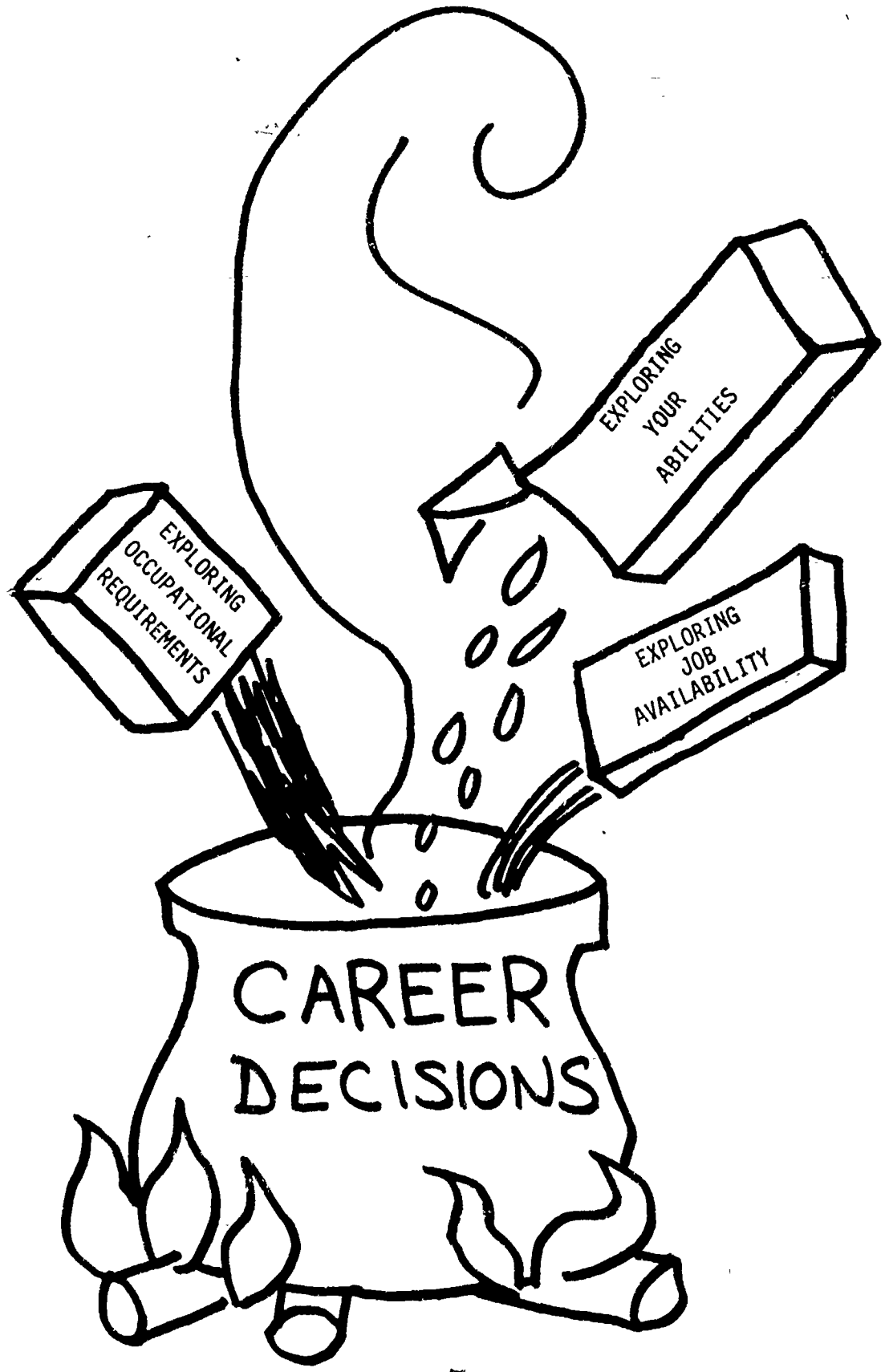


Figure #79



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APPENDIX

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587

GUIDELINES FOR INSTRUCTION OF
SEX EDUCATION
IN LOUISIANA

BULLETIN NO. 1557

LOUISIANA STATE DEPARTMENT
OF EDUCATION
DECEMBER, 1979

588

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FOREWORD

Since 1970, we have operated under La. R.S. 17:281 which prohibited the teaching of a course entitled "Sex Education" in Louisiana schools. During the 1979 Legislative Session, a new sex education law, Act 480, was passed. Instruction in sex education within existing courses of study is permitted on a local option basis with parental permission required.

The sole responsibility for determining whether topics designated "sex education" shall be included in any part of the school curriculum rests with the local school boards. The State Department of Education will provide assistance to all local school systems interested in including sex education topics within the curriculum of their schools.

This informational guide was prepared to assist local school boards in understanding, interpreting, and complying with Act 480.

The Louisiana State Department of Education is pleased to make this guide available to the local school systems in Louisiana.


J. KELLY NIX
Superintendent of Education

ACKNOWLEDGEMENTS

Sincere appreciation is extended to the Ad Hoc Sex Education Committee for their contributions to the development of this guide.

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IMPLICATIONS OF ACT 480*: SEX EDUCATION IN PUBLIC SCHOOLS

1. ACT 480 ALLOWS, BUT DOES NOT REQUIRE, ANY PUBLIC ELEMENTARY OR SECONDARY SCHOOL IN LOUISIANA TO OFFER INSTRUCTION IN SUBJECT MATTER DESIGNATED AS "SEX EDUCATION," PROVIDED SUCH INSTRUCTION AND SUBJECT MATTER IS INTEGRATED INTO EXISTING COURSES OF STUDY SUCH AS BIOLOGY, SCIENCE, PHYSICAL HYGIENE, OR PHYSICAL EDUCATION.

Sex education is not limited to only those areas,
but may also be included in courses such as home economics,
sociology, psychology, or life sciences.

2. WHETHER OR NOT INSTRUCTION IS OFFERED AND AT WHAT GRADE LEVEL IT IS TO BE OFFERED, SHALL BE AT THE LOCAL OPTION OF EACH SCHOOL BOARD. HOWEVER, NO INSTRUCTION SHALL BE OFFERED IN GRADES K-6.

Any subject matter classified as "Sex Education" presently being
taught in grades K-6 should be discontinued.

3. ANY CHILD MAY BE EXCUSED FROM RECEIVING INSTRUCTION IN "SEX EDUCATION" AT THE OPTION AND DISCRETION OF HIS PARENT OR GUARDIAN.

It is up to the local school board to set up the proper
procedures for administering this section.

4. ALL INSTRUCTION SHALL BE IDENTIFIED AND DESIGNATED "SEX EDUCATION."

As an example - A "unit" in a particular course could be
entitled "Sex Education - Venereal Diseases." You should not
try to hide the subject matter that is being taught under the
general topic "Sex Education."

*SEE APPENDIX A

5. "SEX EDUCATION" SHALL MEAN THE DISSEMINATION OF FACTUAL BIOLOGICAL OR PATHOLOGICAL INFORMATION THAT IS RELATED TO THE HUMAN REPRODUCTIVE SYSTEM AND MAY INCLUDE THE STUDY OF VENEREAL DISEASE, PREGNANCY, CHILD-BIRTH, PUBERTY, MENSTRUATION, AND MENOPAUSE.

This does not limit the information to those topics listed.

You may also include other information, for example: birth control, prenatal and postnatal care, and statistics related to human sexuality.

6. "SEX EDUCATION" SHALL NOT INCLUDE RELIGIOUS BELIEFS, VALUES, CUSTOMS, PRACTICES IN HUMAN SEXUALITY NOR THE SUBJECTIVE MORAL AND ETHICAL JUDGEMENTS OF THE INSTRUCTOR OR OTHER PERSONS.

This is the section that limits topics under Sex Education.

7. STUDENTS SHALL NOT BE TESTED, QUIZZED OR SURVEYED ABOUT THEIR PERSONAL OR FAMILY BELIEFS OR PRACTICES IN SEX, MORALITY, OR RELIGION, AND NO PROGRAM SHALL COUNSEL OR ADVOCATE ABORTION.

Factual information on abortion may be taught, but you cannot advocate or counsel about it, or refer students to an abortion agency. If abortion is taught, all methods of abortions, including natural, should be included. If you teach just one method, it may be interpreted as "advocating" that kind of abortion.

8. QUALIFICATIONS AND SELECTION OF ALL TEACHERS IN "SEX EDUCATION" SHALL BE MADE BY THE LOCAL SCHOOL BOARD AND ALL MATERIALS USED IN INSTRUCTION IN "SEX EDUCATION" MUST BE APPROVED BY THE LOCAL SCHOOL BOARD AND BY A PARENTAL REVIEW COMMITTEE.

This parental review committee should be set up by the local school board. See Section III on establishing a parental review committee.

9. FEDERAL FUNDING OR FEDERAL INVOLVEMENT IN PROGRAMS OFFERING "SEX EDUCATION" IS PROHIBITED.

This provision needs to be studied carefully. Faculty, staff, materials, and facilities provided through federal agencies should not be used.

10. ~~IN THE EVENT OF ANY VIOLATION OF THE PROVISIONS OF THE ACT, THE LOCAL SCHOOL BOARD SHALL TAKE APPROPRIATE ACTION TO CORRECT THE VIOLATION AND PUNISH THE OFFENDING PARTY.~~

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Separation of classes by sex was amended out of Act 480, but final Health Education and Welfare Department regulations allow separate sessions for boys and girls at the secondary school level during times when the materials and discussion deal exclusively with human sexuality.



SELECTION OF TEACHERS

Each local school system shall develop guidelines and procedures for the selection of teachers of sex education to be taught as a multi-disciplinary subject appropriate and applicable in such areas as health, home economics, social science and pure science. Instruction should be handled by teachers certified in these respective areas.

In the selection of faculty members to teach the units identified as "Sex Education," the following may be considered:

- Professional preparation may include study in either the biological, physical, or behavioral sciences. These studies may include, for example, courses in human biology, anatomy, physiology, bacteriology, chemistry, psychology, sociology, cultural anthropology, family living, child development, human sexuality, and home economics.
- Proficiency in content and comfort in presenting the material.
- Ability to create a favorable emotional classroom atmosphere for class discussion.
- Ability to assume the role of an unbiased, neutral, and objective discussion leader.
- Possess good rapport with students and have the respect and trust of parents.
- Sensitive to the emotional, physical, and intellectual needs of the students.

Pre-service and staff development programs should be designed to improve a teacher's competencies in teaching strategies, utilization of available resources and materials, and command of subject matter and related areas.

Persons within the community who can offer invaluable assistance in staff development include medical and health professionals, social service personnel, and college faculty members.

Consultants from the State Department of Education can also offer assistance.

ESTABLISHING A PARENTAL REVIEW COMMITTEE

This committee should be set up by the local school board. A workable committee would consist of 10-12 members all of whom are parents having children, currently attending the district's schools.

The committee shall review and approve materials used in instruction in sex education and make recommendations to the school board. In addition to the required approval of materials, the local board of education may wish to authorize the parental review committee to act in an advisory capacity and (1) review state and local guidelines pursuant to Act 480 and make recommendations to the local board of education, (2) function as liaison between school and community, (3) assess local needs and reactions, and (4) foster understanding and acceptance of the program.

The review committee should work closely with the school board in the formation and implementation of this program. Their input and active support represent the key factors in making this a viable program.

ADMINISTRATIVE POLICY FOR DEVELOPING

and/or

COORDINATING PRESENT PROGRAM

The determination whether any sex education materials or topics will be offered at the local level is the responsibility of the school boards. The need for and interest in such a program should be reviewed with input from students, parents, teachers, administrators, and local civic and medical groups.

A. Suggested Guidelines for Program Approval

1. Review the Law and the implications with the school board and secure administrative and school board approval for coordination of the program.
2. Identify, review, and assess present instructional programs dealing with sex education topics.
3. Screen and review available resources and materials of instruction.
4. Organize content outlines, indicate grade and subject areas, and suggest student and teacher activities to be used in various units.
5. Identify local guidelines and establish parishwide goals and objectives.
6. With the school board approval, appoint a local Parental Review Committee.
7. Have Parental Review Committee approve all materials used in instruction and possibly review the proposed programs.
8. Present the proposed program to the local school board for approval.
9. Identify, and assign supervisors and teachers who will be involved in the program.
10. Determine needs for inservice education for school staffs.
11. Provide inservice workshops for the teachers involved in teaching sex education topics.
12. Notify parents of students who may be enrolled in classes offering sex education information of their rights to excuse their child from the class or unit of instruction.
13. Implement program by incorporating instruction into existing courses in the curriculum.
14. Arrange for periodic evaluation of this program as well as continued review of instructional materials by the Parental Review Committee.

B. Procedures for Parent Notification*

As stated in Act 480, "Any child may be excused from receiving instruction in Sex Education at the option and discretion of his parent or guardian."

The Law does not specify how this provision should be administered; therefore, it is up to the local board to set up procedures they deem appropriate. The form and content of the notice should be determined by the local board and used throughout the parish.

A notice in written form should be sent to all parents of students who may be scheduled in a class offering sex education information. This notice should be sent each school year to advise parents of their right to excuse their child from such instruction without penalty or loss of academic credit.

General notices may be published in local newspapers to inform the public of the intent of the school system to teach subjects designated as Sex Education. This should also inform parents of their right to request that their child be excused from those units. It is recommended that this type of parent notification be used in addition to a written notice sent to each parent, and not as the sole method of notification.

*SEE APPENDIX B - Notice to Parents

APPENDICES

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APPENDIX A

SEX EDUCATION IN PUBLIC SCHOOLS

Act 480

AN ACT

To amend and reenact Sub-Part D-1 of Title 17 of the Louisiana Revised Statutes of 1950, comprised of Section 281 thereof, relative to prohibited courses of study, to provide for instruction in sex education in Louisiana public schools; to provide with respect to the intent of the legislature; to authorize local or parish school boards to determine whether or not instruction shall be offered and at what grade levels it shall be offered; to prohibit the offering of such instruction in kindergarten and in grades one through six; to provide that such instruction shall be offered within the confines of an existing course of study; to provide for the establishment of qualifications for and selection of teachers of sex education; to provide for the selection of instructional materials; to provide that parents may excuse their children from such instruction; to prohibit counseling or advocating abortion as part of such instruction; to prohibit the solicitation, acceptance, or use of federal monies to fund such instruction; to provide for corrections of violations of this Act; and otherwise to provide with respect thereto.

Be it enacted by the Legislature of Louisiana:

Section 1. Sub-Part D-1 of Title 17 of the Louisiana Revised Statutes of 1950, to be comprised of R.S. 17:281, is hereby amended and reenacted to read as follows:

SUB-PART D-1. PERMITTED COURSES OF STUDY

§281. Instruction in sex education

A. Any public elementary or secondary school in Louisiana may, but is not required to, offer instruction in subject matter designated as "sex education," provided such instruction and subject matter is integrated into an existing course of study such as biology, science, physical hygiene, or physical education. Whether or not instruction in such matter is offered and at what grade level it is to be offered shall be at the option of each public local or parish school board, provided that no such instruction shall be offered in kindergarten or in grades one through six. All instruction in "sex education" shall be identified and designated "sex education". It is the intent of the legislature that, for the purposes of this Section, "sex education" shall mean the dissemination of factual biological or pathological information that is related to the human reproduction system and may include the study of venereal disease, pregnancy, childbirth, puberty, menstruation, and menopause. It is the intent of the legislature that, for the purposes of this Section, "sex education" shall not include religious beliefs, values, customs, practices in human sexuality nor the subjective moral and ethical judgments of

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the instructor or other persons. Students shall not be tested, quizzed, or surveyed about their personal or family beliefs or practices in sex, morality, or religion.

B. Notwithstanding* any other provisions of law, the qualifications for all teachers or instructors in "sex education" shall be established and the selection of all such teachers or instructors shall be made solely and exclusively by the public local or parish school board.

C. All books, films, and other materials to be used in instruction in "sex education" shall be submitted to and approved by the local or parish school board and by a parental review committee, whose membership shall be determined by such board.

D. Any child may be excused from receiving instruction in "sex education" at the option and discretion of his parent or guardian. The local or parish school board shall provide procedures for the administration of this Subsection.

E. In the event of any violation of the provisions of this Section, the public local or parish school board in charge of administering and supervising the school where said violation has occurred, after proper investigation and hearing, shall correct the violation and take appropriate action to punish the offending party or parties responsible for said violation.

F. No program offering sex education instruction shall in any way counsel or advocate abortion.

G. No program offering sex education instruction shall be funded in any manner with federal funds nor shall such funds be solicited or accepted. Federal involvement in programs offering sex education instruction is expressly prohibited.

Section 2. If any provision or item of this Act or the application thereof is held invalid, such invalidity shall not affect other provisions, items, or applications of this Act which can be given effect without the invalid provisions, items, or applications, and to this end the provisions of this Act are hereby declared severable.

Section 3. All laws or parts of laws in conflict herewith are hereby repealed.

Approved by the Governor: July 13, 1979.

Published in the Official Journal of the State: August 11, 1979.

A true copy:

PAUL J. HARDY
Secretary of State.

*As it appears in the enrolled bill.

APPENDIX B

NOTICE TO PARENTS

Student's Name

Date

Address

The School Board has established a program of instruction in which topics designated as "Sex Education" by Act 480 will be taught. These topics will be taught within existing courses such as biology, science, health and physical education, and home economics. According to the Law, you have the right to excuse your child from participation without penalty or loss of academic credit. If you wish to exercise your right to excuse your child, please indicate below.

Sincerely

Superintendent of Schools
(Or Designated Representative)

_____ My child does not have my permission to attend those segments of existing courses designated as "sex education."

Parent or Guardian's Signature

NOTICE TO PARENTS

Student's Name

Date

Address

The School Board has established a program of instruction in which topics designated as "Sex Education" by Act 480 will be taught. These topics will be taught within existing courses such as biology, science, health and physical education, and home economics. According to the Law, you have the right to excuse your child from participation without penalty or loss of academic credit. Please indicate your choice below.

Sincerely,

Superintendent of Schools
(Or Designated Representative)

_____ My child has permission to attend those segments of existing courses designated as "sex education."

_____ My child does not have my permission to attend those segments of existing courses designated as "sex education."

Parent or Guardian's Signature