GROWTH-DEVELOPMENT BOOKLET

youth ages 0-18

Physical
Emotional
Vocational
Mental
Social

Educational materials developed by
COOPERATIVE EXTENSION PROGRAMS
UNIVERSITY EXTENSION
The University of Wisconsin
This GROWTH-DEVELOPMENT BOOKLET is adapted from the Growth-Development Chart prepared for the Unit, "Growth and Development of Youth," Wisconsin Passport to Leadership Series. The content of the chart was prepared by Donald Stormer, Jean Johnson and Elizabeth Davies, Youth Development Specialists, University Extension, University of Wisconsin.

The simulation of the chart below is for your convenience in identifying specific developmental characteristics of youth at a particular age or developmental stage. For example, if you wish to locate in this booklet the characteristics of mental development of youth ages 12-14, you would turn to page 10; to further illustrate, the physical characteristics of youth ages 6-8 may be found on page 5.

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The Growth-Development Chart was adapted to this booklet form by Wilfred J. Pierick and Howard F. Swonigan, Youth Development Specialists, University Extension, University of Wisconsin. The art work in this publication is by Dale Mann.
Physical Development

1. Physical growth is dramatic. During the first year the infant's weight triples and length increases by one-third.

2. Bones and muscles become strong enough to allow for manipulation, balance and locomotion.

3. Physical needs such as hunger serve as drives to cause behavior. The provision of food acts as reinforcement for behavior, such as crying, that result from the hunger drive.

4. Eye-hand coordination begins to develop.

Mental Development

1. Mental development is largely learning to control physical movement and activity.

2. The infant is intent upon "exploring" his surroundings.

3. The self (distinguishing "me" from "not me") begins to emerge and develop.

4. Language use begins near the end of the first year. The infant is interested in naming things.

5. Near the close of infancy, the child is able to "bring to mind" objects and events that are not physically present or immediately observable.

Social Development

1. Stimulation from mother is important to development -- feeding, talking to, caring, etc.

2. The beginnings of cooperation and competition become apparent in play.
Ages 0-2

1. Emotional responses begin about three weeks of age. By two months, "smiling" and "cooing" emerge with excitement. Fear and anger are learned in six months. Affection as an emotional response occurs about twelve months. Joy and jealousy are learned about 24 months.

2. Dependent upon mother to satisfy needs.

   * Basic emotional needs – love, belonging, security, success, new experiences and independence.

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Emotional Development

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Vocational Development

1. Vocational development during infancy is closely integrated with mental, social and emotional.

2. Emergence of self (distinguishing "me" from "not me") is first step in developing a vocational self-image.

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Ages 3-5

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Early Childhood

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Physical Development

1. Physical growth is rapid but less dramatic than during infancy.

2. Typically, the child will increase about nine inches in height during this period. A weight gain of four or five pounds per year is average.

3. Walking and running become skillful responses to the growth and development of large muscles.

4. Bones are not calcified and there are few breaks.

5. High rates of physical activity require high rates of sleep and rest. Twelve hours of sleep is common.


7. Normal curvature of the spine is developed by the end of this stage.

8. Manual dexterity and hand-eye coordination are developed to the point of allowing the child to write, draw, make things, play musical instruments, etc.
Mental Development

1. Vocabulary expands to about 1,000 to 2,000 words.

2. Language is the means for learning concepts. A child learns to label things and put them into groups.

3. Mental activity deals with the "concrete," specifically, names for real objects of events, such as money, colors, etc.

4. Imitation of adults and peers is a common way of learning.

5. Imaginations are vivid. Fact and fancy are not separated.

6. Life is attributed to inanimate objects. Children often talk to toys.

7. Opportunities to make decisions are desired.

8. "What," "why" and "how" are common questions. Questions often are direct and personal.

Social Development

1. Social interchange is necessary to maximize language development.

2. The child is egocentric and cannot show empathy for the feelings or position of another person.

3. Friendships with peers are being worked out, although they may change often.

4. Boys and girls have similar interests, e.g. playing with dolls.

5. Ready and willing to adjust to the needs of a group of peers.

6. Resistance to authority begins to diminish near the end of this period.

7. Desire to play alone decreases year by year.

8. Interested in small children and animals.

9. Beginning to learn that others have "rights" as games are mastered.

10. Groups are formed without regard to race or color.
Ages 3-5

Emotional Development

1. Differentiation of emotional responses continues from infancy. Emotional responses may be classified as pleasant (smiles and laughter) or unpleasant (anger and fear).

2. Gains are made in feelings of security in the absence of adults.

3. Feelings are transient and uncontrolled — friend of one minute is the fighting enemy of the next.

4. Intense frustration may lead to regression to infantile behaviors such as thumb-sucking.

5. Jealously and rivalry may develop among peers and siblings in gaining approval.

6. Mother is still the most important person in the child’s life.

7. Unreasonable adult pressures for toilet training may cause problems.

8. Sense of self or self-concept continues to develop and needs strengthening.

9. Patterns of emotional responses developed at this stage are basic for later emotional development.

Vocational Development

1. Identification with the appropriate sex role begins. Individual family role is being distinguished.

2. Adult roles are taken in play.

3. Relates the absence of father to "work."

4. Few occupations are visible to a child at this stage — milkman, policeman and TV cowboys are examples.

5. Concept of self as a person or an individual emerges.

6. Independence of care within the household is achieved and some independence in the yard and neighborhood is acquired.
Middle Childhood (Grades 1, 2 & 3)

Physical Development

1. Growth rate is slower than during infancy and early childhood—it is slow and steady.
2. Childhood diseases are most likely to occur.
3. Heart size is rapidly increasing. The brain reaches adult weight.
4. Begins to lose baby teeth and acquire permanent ones.
5. Sexual organs grow at a slower rate than the rest of the body.
6. Muscular coordination and control is uneven and incomplete. Large muscles (e.g. arm and leg) are easier to control than small muscles. Activities involving speed and energy are desired and beneficial. Intense activity may bring on temporary exhaustion. Need 10-12 hours sleep per night.
8. Boys weigh between 45 to 65 lbs. and girls weigh between 40 to 60 lbs. Normal rate of increase is 3 to 6 lbs. per year.

Mental Development

1. Good deal of baby left.
2. Cannot read and write to any level of sophistication at the beginning of this stage, but may be quite self assured in these areas by the end of this stage. Basic understanding of numbers is formed.
3. Able to form concepts similar to those of an adult—e.g. "dog" becomes an abstract category that includes many shapes, color and sizes. Concrete concepts from the preceding age level are grouped into classes (abstract concepts).
4. Almost all new learning involves the use of language.
5. The child acquires the ability to think through former actions and situations.
6. The vocabulary may reach 8,000 words by the end of this stage.
7. Activity is largely in terms of immediate goals. The child deals largely in the here and now. Interest span is short—about 20 minutes.
8. May have a sense of pitch adequate for the reproduction of familiar songs.
9. Comprehends value and uses of money.
10. Wants to produce well-made objects and the period is often referred to as the "eraser stage."
11. Learns best if physically active while learning.
**Ages 6-8**

**Social Development**

1. Peer influence grows during this stage.

2. Most have a "best friend" and often an "enemy".

3. Friends are likely to be of the same sex. By the end of the period, activities are likely to be sex separated.

4. Unstable gangs and groups begin to appear.

5. Concerned about being liked by their peers. Learning to relate to others begins.

6. Sensitive to personal criticism—does not know how to accept failure.

7. Tattling may be a common way to attract adult attention or to help verify standards.

8. To win, to lead or to be first is learned early.

9. Child may feel that he must be "love-worthy" at home and "respect-worthy" with his peers.

**Emotional Development**

1. Strong desire for the affection and attention of parents.

2. Good and bad are in terms of acts approved or disapproved by parents.

3. Tension may be released through physical activity.

4. Common fears such as ghosts, witches, creatures in dark places and man in the woods gradually are replaced by fears of school, social relationships and economic security.

5. Fear of losing parents is dominant.

6. Shyness may be present until the child has experienced some success.

7. Positive view of self continues to develop with successful experiences.

8. Ability to empathize (assess the feelings of others) develops.

9. Distinguished people into in-groups and out-groups but does not discriminate in terms of race and social standing unless adults intercede.

10. Experimental and exploratory behavior should be regarded as part of development.

11. Inner control (conscience) is being formed.
Vocational Development

1. Fantasy state--assumes the role of an adult in fantasy. "Dreaming" is concerned with the ends or results of work.

2. Occupational exploration often becomes a matter of role-taking in play.

3. Concept of self as student, boy or girl, and friend emerges.

4. Sex role behaviors are being developed.

5. Value of "work" is being learned.

6. Independence in the youth community (school, church and youth organizations) begins to emerge.

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Late Childhood (Grades 4, 5 & 6)  Ages 6-8

Physical Development

1. Growth in weight and height continues at a steady rate. Near the end of this period children who reach puberty experience a growth "spurt" and enter early adolescence.

2. Small muscles develop rapidly during this period making enjoyable such activities as hammering, sawing, playing musical instruments and other physical activities requiring small muscles.

3. By the end of this period the child may be as coordinated as an adult, although lapses of awkward behavior are common.

4. Eyes reach maturity in both size and function.

5. Energy abounds--parents often worry about insufficient rest (require 10-11 hours of sleep) and over-stimulation is possible in active competitive activities.

6. Body changes (hips widen, breasts bud, public hair appears and testes develop) indicative of approaching puberty may appear.

7. The range of height and weight widens. Boys weigh between 60 to 90 lbs. and girls weigh between 55 to 90 lbs. Height varies from 50 to 60 inches.
Ages 9-11

Mental Development

1. Reading becomes an individual experience, abstract thought is possible and plans can extend over several weeks.

2. Activities can be evaluated with considerable insight.

3. Attention span increases. Concentration for 30 minutes is possible. Activities that provide variety and interest may hold attention for hours.

4. There is a need for self-expression and self-directed activities to develop intellectual skills.

5. There is a need to know and understand the "why" of things.

6. Ability to deal with abstractions continues to develop.

7. Moral concepts deal with behavior as actions and correspond closely to adult associates.

Social Development

1. Importance of the peer group increases. To be accepted by the peer group is reward.

2. Peer group often becomes a gang, club or secret society.

3. Prejudice can develop during this period.

4. Independence from adults becomes important.

5. "World view" expands from home to neighborhood and local community.

6. Sibling rivalry is common.

7. Ready for discussion on sex—often to correct information from the peer group.

8. Discusses and evaluates others—develops a concept of "fair" or "unfair" as related to the actions of others.

9. Both cooperation and limited competition are enjoyed. Cooperation is more difficult to learn than is competition.

10. Sex role identification continues to develop—to the point of excluding the opposite sex.
Emotional Development

1. Indications of a growing independence occur—disobedience, back-talk and rebelliousness.

2. Withdrawal, depression and cruelty may be indications of failure to develop emotionally.

3. Common fears are the unknown, failure, death, family problems and non-acceptance.

4. Concept of right and wrong continues to develop.

5. Sense of humor develops during this period.

6. Concept of self is enhanced by feelings of competence.

7. Serious emotional disturbances can result from rigorous competition set up by adults.

8. Ready to face consequences of their decisions, if their mistakes are not too serious.

9. Strong attachment to their own sex and show antagonism toward opposite sex.

Vocational Development

1. Occupational considerations and preferences are based on personal abilities and capacities as well as interests.

2. The occupation they expect to enter has less prestige than the one they hope to enter.

3. Selection of junior high courses is a vocational related decision.

4. Self image as "worker" begins to emerge.

5. Desire for part-time employment.

6. Both males and females are entering many non-traditional occupations, however, the current trend of large percentages of the population are now choosing occupations that provide flexible hours.
Ages 12-14

Early Adolescence (grades 7, 8 & 9)

Physical Development

1. A "spurt" in growth is expected during this period. The rapid increase in growth is accompanied by a tremendous appetite. Nutrition can be a problem.

2. A growth spurt may lead to poor physical coordination until the youth is able to handle increased size and length of arms and legs.

3. Skin disorders (acne) are common.

4. Most girls are physically mature; menstruation begins, hips and breasts develop. Girls generally are about one to two years ahead of boys in physical maturity.

5. Boys develop secondary sex characteristics—shoulders broader, chest deepens, and voice may deepen. Most boys will reach physical maturity.

6. Physical characteristics and body structure influence behavior.

7. Girls often are taller and proportionally heavier than boys during this period.

8. Distinguishing physical features such as large feet, ears, nose may be a source of worry.

Mental Development

1. Growing capacity to reason and think abstractly, although manipulation of concrete things is often enjoyed.

2. Persistence shown on tasks in which success is desired. Avoidance or escape from tasks beyond their ability is common.

3. If complex ideas and relationships are too difficult by the end of this stage, the reason is probably lack of experience, not capacity.

4. Youth are ready to take more responsibility in planning and evaluating their own work. Individual problem-solving experiences rather than adult-directed activities are enjoyed.

5. Capacity to plan and organize their own social, recreational and organizational activities.

6. Can discuss current events, politics, international affairs and social issues with some help and background information.

7. Vocabulary may be equal to the adult. However, reading interests are different.

8. The ability to memorize may tempt adults to supply facts rather than to teach them to think.

9. Problem-solving can be developed to the point of creative solutions.
Social Development

1. Early maturing boys may find themselves thrust into positions of leadership, athletics and a status among peers.

2. Participation in youth organizations begins to decline.

3. Dating progression is the non-date social gathering, double dates, single dates and going steady.

4. A feeling of dependence on the rules and regulations specified by parents continues through adolescence (even though protests are often strong).

5. Some groups develop codes of behavior in direct conflict with adult codes.

6. Acquiring skills in social relations including peers and adults.

7. Peer group pressure begins to mount—first from the same sex and later from the opposite sex.

8. "Crushes" are common. Interest in the opposite sex often is shown in contrary behavior—pushing, hair-pulling, etc.

9. Enjoy doing things valued by peer group that leads to personal satisfaction through success and self-improvement.

Emotional Development

1. Worry and/or shame associated with body development may be present.

2. A lack of information about sex may cause adolescents to be uneasy and experimental.

3. Feelings related to sex are intense as contrasted to the more casual feelings of the previous period.

4. A strong emotional attachment to an older youth or an adult may be evident.

5. Keen interest in their own bodies, especially sex and sex processes.

Vocational Development

1. Occupational considerations are based on interests even though interest patterns are not well developed.

2. Vocational preferences are singled out on basis of self-concept.

3. Occupational preferences are involved with sex role and symbols.

4. Vocational preferences mirror the adult world—teaching and nursing rank high with girls.

5. Vocational choices are unrealistic.

6. "Work" takes on some personal meaning.
Adolescence (Grades 10, 11 & 12)

Physical Development

1. During this period, mature height and weight is attained. Girls reach mature height and weight ahead of boys.

2. Heavy appetites continue. Concern about body proportion may cause some ill-advised attempts to reduce.

3. Masturbation is common among girls and almost universal among boys.

4. For the first time since middle childhood, boys and girls are at the same level of physical maturity.

5. Interests in physical activity are diverse—there is difficulty in organizing activity that will interest the entire group.

Mental Development

1. Youths have reached adult mental capability.

2. A personal philosophy begins to emerge—they express personal opinions on religion, our political and economic systems, etc. Discussions centering on the activities of adolescents or on the world are enjoyed.

3. Abstract thinking and problem-solving may reach a high level.

4. Adolescents can choose purposes, make plans, carry them out and evaluate the results.
Social Development

1. A strong desire to acquire status in and conform to the peer group. Lifelong friendships develop.

2. A common desire is a "place" of their own where they can get together with friends—a place to "hang-out".

3. Interest is high in social skills and activities.

4. Girls usually are more socially advanced than boys—boys close the gap during this stage.

5. Need for increasing freedom from parental control to make decisions and accept the consequences.

6. The peer group assists in the process of gaining independence from the family by providing the support needed. There remains a need for parental support. Status is associated with popularity, leadership and athletic achievement rather than intellectual achievement.

7. Performing adult roles gives great satisfaction and increases self-identity.

8. Dating is characterized by more stability, trust depth of feeling and understanding.

9. Conflicts arise as parents focus on behavior and youth on ideals. Deviant behavior may stem from poor relations with parents and other adults.

10. Lives in two worlds—the adolescents behavior, as well as what adults expect of him vacillates between adult and child.

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Emotional Development

1. Desire to determine sexual adequacy and curiosity may multiply the effect of the sex drive.

2. Vacillating attractions of childhood and adulthood may cause moodiness.

3. Needs to develop an attitude of acceptance toward body and appearance.

4. Common concerns are achievement in school, getting along with parents, acquiring status among peers, how far to go in necking and petting, and decisions about marriage, college, occupation and military service.

5. Not having dates may be a source of anxiety for girls.

6. Marriage and family life may be effected by handling sex as a matter of ignorance, shame and fear.

7. Feelings of inferiority and inadequacy are common.
Ages 15-18

Vocational Development

1. "Exploration stage"—occupations are explored until entry into a beginning job in an appropriate field.

2. Occupational preferences and considerations are based on needs, values and opportunities in addition to interests and capacities.

3. Occupational preference is an expression of the vocational self-concept.

4. Interested in appraising abilities.

5. Vocational preferences become more realistic—what they want and what they expect to get in an occupation come closer together.

6. Choice of high school subjects is vocationally relevant.

7. May "hold down" a regular part-time job.

8. Vocational preference is crystallized.

9. Choice of college and/or college major is a vocational decision.

10. About the time of high school graduation, the individual realizes preferences are too subjective and adopts an instrumental attitude toward work—working conditions, training required and financial return are considered.

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