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The Diabetes Education Center's Developmentally Appropriate Diabetes Education (DADE) Project

Resource 1:

Developmental Characteristics of the 6-to-8-Year-Old

A Resource for the Development of Developmentally Appropriate Curricula

Developmental Characteristics of the 6-to-8-Year-Old

An Individual in Transition: Between Family and School, Childhood and Preadolescence, Dependence and Self-Reliance

Outward and Upward

As Karen DeBord has noted, "there are three great 'outward journeys'" of the 6-to-8-year-old. These three journeys can be represented as:

- **Social** — out of the world of the caregiver and into the world of friends, peers, and other authorities;
- **Physical** — into the world of games and school;
- **Cognitive** — more fully into the world of adults and abstract ideas, logic and communication.

Several key changes, both internal and external, occur during the age of 6 to 8 years. Development of gross and fine motor skills result in increased coordination and ability in activities such as running, jumping and sequential movement. Reaction time is decreased as well, giving the 6-8 year old the ability to function as part of a team. However, the 6-8 year old is very sensitive to social comparison (winners vs losers), so competition should be minimized at this stage. In general, boys of this age are somewhat ahead of girls in gross motor skills, but girls lead boys in fine motor skills. Indeed, the refinement of fine motor skills and the ability to maintain fine motor activity without fatugue enables some 6-8 year olds to produce intricate handiwork, such as needlecraft, which rivals that done by adults.

Physically, changes which indicate maturation such as losing baby teeth and gains in weight and height lead to comparisons to others. 6-8 year olds may be extremely sensitive about differences between themselves and others, and this is particularly true of the child with diabetes, for whom the differences are magnified and made a subject of discussion. Special care must be made to emphasize the "non-uniqueness" of the diabetic child, and since cognitive

changes in the 6-8 year-old have made her keenly aware of "moral" causes and effects and justice, emhasis should be placed on the blamelessness of the child regarding her disease process. 6-8 year olds, are, however, more capable of taking responsibility for their actions (particularly regarding diet and management) than are their younger counterparts.

Increased immune resistance gives the 6-8 year old better general health than her younger peers, and well-established binocular vision and maturation of the corpus callosum give the 6-8 year old the ability to attend school faithfully as well as the ability to take on academic tasks with increased speed and persistence. Some farsightedness may remain until around age nine, necessitating larger print. The maturation of the corpus callosum and "pruning" of synapses allows for increased "lateralization," and assists the 6-8 year old as she moves from, in Piaget's terms, the "preoperational" to the "concrete operational" stage; the 6-8 year old is capable of grasping abstract concepts (such as, say, chronic complications) but they must be tied to a concrete, real, referent (that is, the 6-8 year old will not understand the term/concept "concrete operational thinking" except as an ability to understand or do some particular thing).

The 6-8 year old understands and undergoes significant changes in her socio-cultural place, making huge strides in academic work, moving fully into the world of adult language and communication, utilizing moral reasoning and increased memory, memory strategies, and awareness of memory processes. The 6-8 year old is awareof and capable of handling changes in her socio-cultural expectations and demands just as she is able to "play by the rules" in game situations. She is capable of understanding multiple perspectives, which enables her to see herself as part of a larger community or team, and is also able to understand multiple meanings of terms, as well as the appropriateness or inappropriteness of actions in given contexts.

The utility of understanding the developmental abilities of the patient involved in pediatric diabetes education can hardly be overemphasized. Awareness on the part of the educator can lead to quicker and more lasting mastery of the content of the curriculum, as well as a more-realistic, and positive, self-understanding. A Lack of awareness can result in frustration, ignorance, noncompliance and decreased self-esteem.

Following are some pertinent individual developmental characteristics, compiled from The National Association for the Education of Young Children's Developmetally Appropriate Practice in Early Childhood Programs, Sue Bredekamp and Carol Copple, eds, and Karen DeBord's Children: How They Grow, Elementary School Children Ages 6 to 8, published by Uni. Of Missouri Extension Service, available online at http://www.classbrain.com/artread/publish/article_36.shtml. **Items in bold are of particular relevance to diabetes educational programs.**

Social and emotional development

- Attachment to friends grows during this stage. Children want to continue to play with friends and don't like to be interrupted. Try to give them a 5- or 10-minute warning before they really have to leave.

- Most have a "best friend" and often an "enemy." **Much activity centers around how to stay with friends and identify who is "not wanted."**

- Friends are likely to be the same sex. Activities are becoming sex separated — girls don't want boys to interfere with their games and vice versa.

- Tattling is a common way to attract adult attention and to help learn the rules. Give the child lots of positive feedback for good behavior, and **let the child help define the rules.** This will not only build self-esteem, but will cut down on the negative behavior of tattling.

- To win, to lead or to be first is valued. **Children in this age group are competitive, they try to boss and are unhappy if they lose. Encourage noncompetitive games and help the child set individual goals.**

- Children in this age group often become attached to an adult other than their parents such as a teacher, club leader, caregiver or neighborhood teenager. **They may quote their new "hero," try to please him or her and compete with other children for this adult's attention.**

- **During the years from 6 to 8, children have a strong desire for the affection and attention of parents. There is much "reporting" of activities to family. Parents need to set aside time specifically to listen and talk to children with no interruptions.**

- **Good and bad are defined by what's approved or disapproved of by the family.**

- Children in this age group release tension through physical activity. For example, **children may be extremely active when tired.** Adults need to encourage quiet play (board games, painting, puzzles) before bedtime or when children are overly tired.

- **More realistic fears replace the common preschool fears** of ghosts, witches and creatures in dark places. These new fears revolve around school, social relationships and disaster. **Adults need to give children measured doses of realistic information to help them handle fears. Never tease or joke about ideas that frighten them.**

- **A positive self-concept continues to develop with successful experiences. Help children celebrate their positive achievements.**

- **Children in this age group are sensitive to personal criticism and do not know how to accept failure. Concentrate on your children's successes and teach them how to learn from criticism. Ask them, "Can you learn how to do it differently next time?"**

- **Experimental and exploratory behaviors are a common part of development. Children often try out a new behavior just to see how it feels to imitate a friend.** If it is not dangerous, parents should ignore such behavior or comment, "That's interesting to try. What did you learn?"

- **Inner control (conscience) is being formed.**

Physical Development

- **Growth rate at this stage is slower than during infancy and early childhood but steady. Weight ranges from about 40 pounds to 65 pounds. The normal rate of weight increase is 3 pounds to 6 pounds per year. Children's need for food may fluctuate with activity.**

- Childhood diseases such as measles and chicken pox are likely to occur at this time because children interact with large numbers of peers on a daily basis in school. Children who were in day care may have already had these diseases or have built up resistance. Adults need to be prepared for school absences due to illness when they occur.

- **Baby teeth begin to come out, and permanent ones come in.**

- Muscle coordination and control is uneven and incomplete, but making progress. Large muscles (used to move the arms and legs, for example) are easier to control than small muscles (used to move fingers). Intense activity may bring temporary exhaustion. Children of this age need 10 hours to 12 hours of sleep each night.

- Hand skills and eye-hand coordination needed for activities such as writing and shoe lacing continue to develop as children gain small motor skills. Projects will often appear messy as children work to polish these skills. Encourage children to work briefly with small motor tasks, and then switch to running and jumping — tasks that use their more skilled, large muscles. Building both skill areas is important for physical development.

Mental Development

- Around age 7 or 8, **children begin to think about their own behavior and about things they can easily imagine, such as sharing with a friend or going on a drive. Adults can do simple reasoning with children now. Asking "what if" or "how could we solve this" questions will help the child develop problem solving skills.**

- **Children in this age group begin to form ideas mentally, and they can group things together that belong in one category (babies, fathers and mothers are all people). The next level of mental development is sequencing and ordering, preparing the way for math skills.**

- **During the early part of this stage, children cannot be expected to read and write skillfully, but should be quite self-assured in these areas by the end.** During this stage children form a basic understanding of numbers. Encourage these skills by letting them read signs, make lists, count or write prices of objects they buy.

- **They can think through their own actions and situations to understand causes of events. For example, a 7-year-old generally knows why he or she was late to school.**

- At this age, children tend to talk as they learn, **and they learn best if active while learning**. **For example, 6- to 8-year-olds will learn traffic safety rules more easily by manipulating a landscape of blocks, toy cars and figures than by sitting and listening to an adult explain the rules.**

- **The interest span of 6- to 8-year-olds is short — about 20 minutes. Don't expect them to spend much more than 20 minutes alone on any task.**

- They understand the value and uses of money, they can begin to plan for their allowances and learn to use money for items they want
- **The process of work is more interesting to children in this age group than the resulting product. They may begin many projects, but finish few. Teach them to use new tools and materials and to enjoy exploring. Don't be worried about completing everything.**
- **They may take on the role of an admired adult in fantasy or dramatic play.**
- At this age, children begin to learn the value of "work." They need regular, realistic chores at home and school. Charts with pictures to check-off chores help children remember what to do.
- They show some independence in the youth community (school, church and youth organizations). Adults should encourage these positive experiences in a caring community.

The six-year-old

- **Highly active**
- **Dislikes losing**
- **Usually not modest**
- **Works in spurts**
- **Self-centered**
- **Seeks to be center of attention**
- **Has positive attitude toward school**
- **Proud of self and skills**
- **More ready to give than receive criticism**
- Often competitive with brothers and sisters
- **Sensitive about being called names, but calls others names**
- Often pairs up and has best friend; tends to enjoy leaving out a third child
- **Interested in games with rules and action but lacks skill**
- **Enjoys rough-housing but does not know when to stop and may end up hurt, upset or exhausted**
- **Learning to write letters and numbers, often backward**
- **Has a very difficult time making choices and decisions, hesitant, indecisive**

The seven-year-old

- **Is active**
- **Likes to know rules**
- **Sees teacher as authority**
- **Worries about being liked**
- **Complains of unfair treatment by playmates**
- **Listens as well as talks at mealtime**
- **Enjoys activities alone as well as with others**
- Relates equally to brothers and sisters but this depends on age (closer in age, more fights)
- **Very sensitive to reactions of others**
- **Wants to do things right — erases and tries again and again**
- **Is beginning to enjoy reading as a pastime if there has been success learning this skill**
- **Begins to show politeness and consideration; less opinionated and stubborn**
- **Begins to be modest and concerned about "private parts" or sexual organs**
- Shows friendship by sharing possessions, secrets and time together
- **Begins to understand games with rules and relates rules to socially appropriate behavior**

The eight-year-old

- **Enjoys dramatic play**
- **Often demanding of parents**
- **Curious about nature, things and people**
- **Talks with adults rather than to adults**
- **Concerned about the reasons behind things**
- **Likes to help when in the mood**
- **Makes collections of all kinds of things**
- Seeks new experiences; tries out new behaviors sometimes including swearing or challenging rules
- Attitude toward opposite sex a combination of liking and hostility
- **Discovering parents are human and make mistakes**
- **Often more polite away from home than at home**

- **Begins to select friends on basis of personal qualities or for a reason, not always positive**
- **Keen sense of privacy: "This is my room — keep out!"**
- **May be very self-critical**
- **May show anger by sulking rather than using harsh words or fighting**