The Young Adolescent Learner Fran Salyers and Carol McKee

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Early adolescence, aptly described by John Lounsbury as "The Wonder Years," is a time of unprecedented growth and change for young people. Parents wonder if they will survive their child's journey through puberty, middle grades teachers wonder how to keep their students focused on learning, and young adolescents themselves wonder if they are normal. Yes, these are the wonder years.

Age Range

Young adolescents are defined in *This We Believe* (National Middle School Association, 2003) as those students who are 10 to 15 years old. They need educational programs that are designed specifically for their age group because of their uniqueness in terms of intellectual, social, emotional, and physical development. The phenomenal growth that is occurring at this time of their lives presents unique challenges for educators. Also, this is a time of life when young people are forming values and making decisions that will impact them for the rest of their lives. This is a most impressionable age, which places additional responsibility on middle grades educators.

The middle grades are usually thought of as grades 5 through 8; however, there are many variations that can be housed in a middle school. More than the grade levels, it is the *program* that makes a facility a middle grades or middle level school. The program must be responsive to the academic and developmental needs of the young adolescent learner.

Developmental Changes

During this stage of life, young adolescents experience more growth than any other time in their life except for infancy. Families and educators see the physical changes and they hear much about the emotional and social dilemmas of puberty; however, many people are not as knowledgeable about the intellectual changes occurring during early adolescence.

As Lucinda Wilson and Hadley Wilson Horch discuss in their September 2002 article in *Middle School Journal*, recent research has shown that the early adolescent brain goes through a growth spurt just before puberty and then a period of "pruning," when heavily used connections between parts of the brain are strengthened and unused connections deteriorate. This growth spurt and pruning are most noticeable in the prefrontal cortex, which is the part of the brain where information synthesis takes place. It is also the part of the brain that controls planning, working memory, organization, and mood modulation. This area of the brain does not mature until about 18 years of age. The process of "hardwiring," which continues throughout adolescence, means that the intellectual activities given the most time, the most opportunity to strengthen the connections in the brain, will influence learning for the rest of the student's life. (Wilson and Horch, 2002, p. 58)

Not only must educators address these developmental changes, they also must deal with the varying rate at which students undergo these changes. The only consistent point about the development of young adolescents is that it is inconsistent. In eighth-grade classrooms, there is a six- to eight-year span in physical development among the students; and in seventh-grade classrooms, there is a six- to eight-year span in academic achievement. (NMSA, 2000, pp. 9-10) One only has to walk the halls of a middle grades school during class change time to see the differences in physical, emotional, and social development. It is easy to forget the intellectual development differences since they are not readily visible, but if you observe in a middle grades classroom you will soon become aware of these differences, too. For example, young adolescents are moving from concrete thinking to abstract thinking, but this transition is occurring at varying rates for different children, and individual students move back and forth from concrete to abstract continually or function differently in different classes. Students are beginning to think about thinking, and this sometimes confuses them.

Implications for Classroom Instruction

Teachers of middle grades students need to be knowledgeable of the varied developmental characteristics of young adolescents so that they can design instruction and classroom management strategies that address these ongoing changes, and support and capitalize on these characteristics.

Using findings from the brain research, one strategy teachers can use to hold the attention of young adolescents is to design lessons that include a full range of sensory motor experiences, including music, smell, touch, and emotion. Engaging the senses and emotions will increase student attention span and heighten memory. Another strategy is to build lessons using inquiry or problem-based learning in which students are encouraged to ask questions that interest them after the lesson is framed in terms of essential questions or problems to resolve.

Using essential questions to frame the unit, incorporating the senses and emotions to focus the learning, and then facilitating students in finding multiple ways to solve problems can focus adolescent learning while building complex neuron connections within the brain. (Wilson and Horch, 2002, p. 59)

Another strategy to strengthen connections in the brain is to ask students to write reflectively every day. This gives time for students to consolidate learning and seek meaning between various activities. Students should also be encouraged to use peer collaboration and cooperative learning at this age to take advantage of the great range of academic and social maturities while developing group problem solving skills. Allowing for student choice and making lessons relevant to the interests of young adolescents will engage students in learning while addressing their need to show independence. (Wilson and Horch, 2002, p. 59)

Appropriate lessons for early adolescents also need to provide opportunities for movement and physical exercise because there is a developmental reason young adolescent students fidget and are unable to sit still—various bones including the tailbone are hardening, making it uncomfortable for them to sit for long periods of time.

Key Generalizations About Young Adolescents

This list of generalizations appears in John H. Lounsbury's "Understanding and Appreciating the Wonder Years" (National Middle School Association, 2000).

- Early adolescence is a distinctive developmental stage of life.
- The general public has limited understanding of these 10- to 15-year olds.
- The accelerated physical and personal development that occurs during this period is the greatest in the human life cycle and is marked by great variance in both the timing and rate of growth.
- These are the years during which each individual forms his/her adult personality, basic values, and attitudes.
- Adolescents reach physical maturity at an earlier age than their grandparents and they
 acquire apparent sophistication earlier than in previous generations.
- They seek autonomy and independence.
- They are by nature explorers, curious and adventuresome.
- They have intellectual capacities seldom tapped by traditional schooling.
- They learn best through interaction and activity rather than by listening.
- They seek interaction with adults and opportunities to engage in activities that have inherent value.
- Their physical and social development become priorities.
- They are sensitive, vulnerable, and emotional.
- They are open to influence by the significant others in their lives.
- A significant portion of today's teenage population is alienated from society.

Developmental Characteristics of Young Adolescents

These characteristics—compiled from *This We Believe* (2003), *Caught in the Middle* (1987), and *The Exemplary Middle School* (1993)—have been grouped into four categories: physical, intellectual, social, and emotional. All four areas are important and directly impact what should happen in the classroom. No one area should take priority over the other and all areas must be addressed.

In addition to remembering the characteristics of young adolescents, teachers should also consider best practices for teaching writing. These practices need to be linked to developmental characteristics in order to design the most effective instruction and optimize learning for young adolescents. (See the list of best practices available on the home page of the *Write in the Middle* Web site.)

Physical Characteristics

- Girls are often taller and more physically advanced than boys in the earlier stages of adolescence.
- Incommensurate growth of heart and body weight may result in functional heart murmurs
- Uneven bone-muscle growth and/or disproportionate changes in weight and muscle development result in awkwardness.
- Cartilage in certain skeletal areas (e.g., tailbone) hardens.
- Sexual maturation often occurs.
- Periods of extreme restlessness alternate with fatigue.
- Chemical and hormonal imbalances often occur.
- Rapid growth results in increased nutritional demands.
- Physical movement, rest, and change of activity are all necessary.

Intellectual Characteristics

- Enjoys both intellectual and manipulative activities
- Prefers active involvement in learning
- Motivated to learn when lessons are related to immediate goals and interests
- Argues to clarify own thinking and to convince others
- Possesses a vivid imagination
- Exhibits independent, critical thinking
- Forgets easily because his/her mind is so preoccupied with other issues
- Sees relationships among similar concepts, ideas, and experiences and makes inferences
- Seeks to find causal and correlative relationships
- Begins to understand abstract ideas (but research indicates that many remain in concrete operations stage)
- Makes personal-social concerns a priority over academic matters
- Likes to discuss experiences with adults
- Shows intense curiosity about the world and him/herself
- Forms long-lasting attitudes about learning
- Begins thinking about own thinking (metacognition)

Social Characteristics

- Desires to make personal choices
- Desires social acceptance
- Seeks peer relationships in order to conform to group norms
- Has more interest in relations with the opposite sex, but same sex friendships dominate
- Strives to define sex role characteristics
- Vacillates between desire for regulation and direction and desire for independence
- Wants identification with adults but not always willing to accept their suggestions
- Shows concern for oppressed groups
- Shows willingness to work and sacrifice for social rewards
- Tests limits of acceptable behaviors
- Needs frequent reinforcement that significant adults including parents care
- Diminishes family allegiances and strengthens peer allegiances but still strongly dependent upon parental values
- Is frightened by new settings, including school
- Easily loses track of time
- Likes fads, especially those shunned by adults
- Needs moderate amounts of time alone, in order to regroup and reflect on daily experiences
- Feels vulnerable to social inequities

Emotional Characteristics

- Relates self-esteem and self-concept to degree of physical development
- Questions whether he or she is normal as related to physical appearance and development
- Begins to deal with and understand nuances and "shades of grav"
- Experiences simultaneous emotional conflicts
- Exaggerates responses to anything with sexual implications
- Seeks to sort fact from folklore in regards to sexual development
- Desires attention, sometimes without regard to how it is secured
- Shifts moods rapidly
- Can become rebellious toward adults

- Is easy to offend, sensitive to criticism
- Believes adults do not understand
- May be inconsiderate of others
- Shows optimism, hope for the future
- Displays prankish sense of humor
- Values direct experience in participatory democracy
- Observes flaws in others easily but slow to acknowledge own faults
- Believes personal problems, experiences, and feeling are unique to self
- Searches for the answer to "Who am I?"

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