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Human development is a complex process, involving several interrelated variables, including cognitive, emotional and physical maturation. An individual's overall education, both in and out of the classroom, serves as a cornerstone to her development of healthy interpersonal skills and sound relations throughout her life.

The seamless nature of these factors makes each individual being especially unique in her expression of self and contribution to the larger group. Throughout her young life, a child's brain is constantly adapting to new demands from her respective community and the world at large. Her neurological 'equipment', therefore is dynamically shaped by events and stimuli in her daily life. In this sense, the human brain is quite supple in its' ability to acclimatize or adapt to many different social environments.

Assuming one is raised in a supportive atmosphere that is conducive to healthy habits, she is bound to blossom as a unique individual during her mid childhood, (between the ages of seven and nine). Similarly, she is likely to nurture stronger connections with peers at this point in her life.

A child's cognitive and social growth both support her ability to communicate and think logically during the primary stages of development. The process of thinking and making decisions naturally entails social relations and cultural exposure. More specifically, cognitive development involves the shifting of ideas, processing of thoughts, and reflecting on experiences that take place throughout one's mid childhood.

According to Jean Piaget, children's thinking transforms in stages as they consider notions of physical phenomena and mathematical concepts. Later research has reveled that formal operational thinking is in fact related directly with the individual experience. Stages of development are, therefore, contextually variable.[1]

One's membership to the greater society, in turn, is sculpted by her development throughout the earlier stages of life. The way that each person's talents and acquired tendencies are woven into the fabric of her life relies heavily on her innate predisposition. Similarly, the education she receives and incidents that take place in her life influence her development to a great extent. The variables determining one's growth, in turn, do not follow a linear pattern or abide by any absolute blueprint.

[1] 1 p.240, Rogoff

Psychologists, however, continue to investigate the stages of human development generally experienced from the time of conception throughout adulthood. Certain highly esteemed researchers such as Jean Piaget, Mel Levine and Lev Vygotsky pay special attention to childhood development, focusing on similarities and differences amongst members of particular age groups at different stages in their development. While debates on the roles of nature versus nurture continue to simmer amongst psychologists, there is general agreement that a network of interrelated factors sculpt the primary stages of every child's growth. That is to say, biology and experience play an equally critical role in the formation of the human brain, which serves as a platform to all other aspects of human nature.

This organism provides the foundation to one's innate tendencies, cognitive capacities, and physiological abilities. One's development, therefore, is made up of far more variables than her predetermined genetic schema. While one's DNA has a considerable degree of influence on his/her overall disposition and physiological make up, the process of development she experiences is highly relative to a series of events in her life as well as her overall education. While functions such as breathing or sweating are in fact hardwired at birth, one's ability to learn and memorize are very much molded and altered by her environment, upbringing, and day-to-day experience. The root source of one's strengths and weaknesses, therefore is somewhat blurry.[2]

It has been argued that the nature of one's upbringing and his genetic predisposition have an equal effect on his development. Individual cognitive skills in fact derive from one's ongoing engagement in socio-cultural activities. At the age of eight or nine, therefore, a child's level of maturity and cognitive processing is influenced a great deal by his involvement in the world around him. In turn, the texture or flavor of one's social persona, level of productivity, and intellectual aptitude is shaped by the attention and effort his immediate caregivers and teachers invest in his education, (in both an academic and a social respect). Needless to say, human development is a lifelong process of physical, behavioral, cognitive, and emotional growth that is not solely shaped by the external world. In the early stages of life, however, enormous changes take place in a child's life that are in fact determined by exterior influences. Through joyful, painful and stimulating experiences, each person adopts certain attitudes and values that guide choices, relationships, and understandings throughout her life. Ultimately, every individual must make contact with her own intuition in order to gain clarity and purpose in her life. It is important for each stage of one's development to fit together nicely,

[2]2 http://www.architecture.mind.com

serving as a springboard to individual fulfillment.

Children of this specific age range seem to be genetically hardwired to develop the skills necessary to process more complex ideas, understand reality in two dimensions, where they can focus on the past, future and present tense. They also develop an increased attention span with which they can better complete tasks and retain information. Owing to the latter aspect of ones' cognitive development, a typical eight year old generally experience growth in self-control, developing the ability to conform to adult ideas of what is "proper" behavior and to recognize appropriateness in behavior. Based on improved memory, heightened cognitive strategies and more logical thinking skills, eight year olds begin to think more independently, develop individual opinions and understand the varying responses of different individuals.

Between the ages of seven and nine, children begin to develop a sense of autonomy from their parental figures. Similarly, they share a stronger sense or unity or kinship with their peers. Naturally, children gravitate toward their own gender in both recreational as well as academic settings. The nature of these relationships depends largely on their individual psychological make-up as well as the process of cognitive development they may be experiencing however.
By the time they have reached the third grade in the United States school system, children have achieved a more tangible sense of self, whereby they have a visceral understanding of their own strengths and weaknesses. In turn, their personal interests are more clearly defined and social tendencies a bit more refined. Nevertheless, children of this age group are required to sharpen their perceptual skills in the analysis of two-dimensional patterns, embarking on a more formal education. Consequently, certain young learners' who are exposed to abuse or negligence at home face challenges with the organization of information and retention of new concepts. Other students find the restrictive nature of their academic environment simply intolerable. On the other end of the spectrum, various children of this age group strive to please their teachers, memorizing new facts and grasping fuller use of the English language. In order to thrive in the American classroom, it is necessary for seven to nine year olds to get support from role models at home and in the classroom.

Between the ages of seven and nine, children are still in the phase of acquiring their basic language skills. At this point in one's life, she is not prone to grapple with abstract concepts or symbolic meanings. Instead, she is establishing a firm comprehension of the more literal words of the English language and finding ways to apply them to practical situations, thereby communicating her basic thoughts, needs, or wishes. Towards the

latter end of this stage, however, certain children begin to grapple with higher language skills, entertaining more technical chunks of words or ambiguous ideas. This particular group of children may include those who are granted special attention from tutors and/or caring parents. Language plays as an important role in this equation, serving as a platform to higher order thinking and attention to details.[3]

> **"Expressing intentions and indicating what those intentions refer to are only the beginning of learning a language, of course." P.37, The Meaning Makers: Children Learning Language and Using Language to Learn , Gordon Wells, Heinemann, ©1986**

Nevertheless, it is undeniable that nearly all children of this age range have little patience in their attempts to gain competence over the tools of the trade, such as handwriting, computer skills, drawing or practicing simple geometry.[4]4 It is their teachers' responsibility to nurture participatory classroom activities, monitoring each child's level of involvement and offering guidance along the way. Scientific analysis reveals that children of this age range have begun to grapple with more abstract concepts in their math classes, grasp a comprehension of lengthier compositions in English, and perhaps dabble in the creative arts or join a sports team. Similarly, they tend to exhibit more gregarious, humorous tendencies.

> **"In contemporary culture, not as much attention is paid to oral language production, the ability to encode ideas into clear, cogent and colorful semantics, syntax and discourse. Verbal eloquence and fluency are dramatically less evident in many classrooms as a result. Effective oral language serves an abundant of purposes." 143, A Mind at a Time, Mel Levine**

Children between the ages of seven and nine generally enjoy explaining their ideas, sometimes exaggerating in their using new vocabulary words. They also tend to get engrossed in the activity at hand, exploring their own limits while collaborating with a larger group of peers. Seven and eight year olds can often be found socializing with classmates in the classroom or playing with teammates on the soccer field while mastering basic skills and developing better team building skills.

A considerable amount of research reveals that children begin to think through their actions and consider them in a more critical manner during middle childhood. At this point in one's life, she is apt to exhibit more logical thinking skills and engage in what is known as the concrete operations stage of development. Owing to this tangible transition in one's growth, each aspect of his cognitive functioning is enhanced. A child's understanding of the physical world and her role in it supports her ability to make better

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[3] 145, A Mind At A Time, Mel Levine © 2002, Simon and Shuster Paperbacks

[4] P. 85,Yardstick, Wood, ©1994, Northeast Foundation for Children Cognitively

decisions and predict the outcome of her actions, thereby engaging in more critical thought. During the concrete operational stage of a child's development, she becomes equipped to internalize actions through the combination, separation, and transformation of objects.

Overall, a child's metalinguistic awareness increases at a regular pace during mid childhood. Her ability to use language, grasp its' intricate web of semantics, rules of syntax as well as the appropriate application of lexis and grammar in any given context tends to take shape at this point in one's life. Her linguistic aptitude clearly supports many other neurodevelopmental systems as well. An individual's ability to memorize strings of information and process new concepts is supported by her metalinguistic aptitude. A child's capacity to process images and ideas visually as well as arrange certain spatial concepts is strengthened a great deal during mid childhood too.

This period of maturation is marked by one's ability to communicate more effectively about specific objects that the respective listener cannot see. Children of this age group are also more prone to consider how others may perceive others, or feel a certain way and act differently. Moreover, seven to eight year olds experience a considerable decline in their egocentric view of the world. They are more prone to regulate their social behavior, follow rules and grasp the consequences of their actions. Owing to increased memory capacity, accumulated knowledge and the development of different cognitive strategies, the emergence of two-sided thinking is common for seven to eight year olds across a wide span of cultural backgrounds.[5]5 Children of this age group, therefore, have better tools to shape their own worlds and relate to others.

Through the process of seeking membership to different groups and exploring their own boundaries in and out of the classroom, children of this age group sample distinct roles in a variety of environments. Depending on one's role in the family, (as an older brother, younger sister, new step-sister, etc), as well as his disposition in the classroom and playground, a child's sense of accountability to the larger group is sharpened and a stronger sense of individuality is formed. Children of this age group enjoy working cooperatively and are most productive in groups. Interestingly, children between the ages of seven and nine years old show signs of social awareness, with a growing sense of moral responsibility. They tend to exhibit interest in issues concerning justice and equality across cultural and/or racial disparities.

[5] 482, Middle Childhood

As children of this age group work through the trials and tribulations of character development, feelings of industry or inferiority will form, depending on the stimuli present and the events taking shape in their lives. The child who is successful in mastering new skills in a sport or in math will most likely feel respected by her parent and greater self-esteem. The child who is experiencing limited success or even failure is more likely to feel inferior or disappointment, however.

Between the ages of seven and nine, distinct regions of a child's brain are in the process of developing, connecting on both an internal and an external plain. Throughout this stage of her life, a child is accumulating information at a faster rate while acclimating to new environments outside of the home and developing fresh skills to adapt accordingly. The synchronization of electrical activity in different regions of one's neurological system increases greatly during middle childhood, making it possible for different parts of the brain to function more successfully as corresponding structures. In turn, the changes taking shape in the frontal lobes of a child's brain serve as an impetus to more complex coordination of thought, action and impulse. At this age, children are better equipped to control their impulses, maintain their attention on one stimulus, devise explicit plans and engage in periods of self-reflection.[6] Similarly, kids of this age range may achieve a sense of clarity with regard to her talents and/or academic aptitude as she becomes far more industrious in this stage of development.

> **"Vygotsky argued that development first takes place on a social plane. The child observes the parents' behavior, listens to the parents' speech, and tries to imitate. The parents guide the child in his/her efforts, making corrections when needed and providing greater challenges when appropriate." (**Play: A Vygotskian Approach, Vygotsky, Lev S. 1967. "Play and Its Role in the Mental Development of the Child." Soviet Psychology 5:6–18.

An important psychological characteristic many healthy eight year olds share is their receptiveness to their social environment and the influence their education has on their development. In fact, most primary school students are quite aware of their purpose in school and tend to understand the importance of the everyday activities they are expected to carry out. At this stage in one's psychological development, her academic self-image is formed.

> **"Making a good adaptation in the first few grades, therefore, can lead to considerable differences in the amounts children learn over their school careers, especially since the basic skills covered in the early years provide a crucial foundation for later learning." http://www.futureofchildren.org/information2827/information_show.htm?doc_id=77707**

[6] P. 475, Cognitive and Biological Attainments of Middle Childhood

Each individual child possesses many tools to support a diversity of functions. In order to sharpen these instruments to their utmost efficiency, a young learner must granted the opportunity to interact with others in a highly conducive, structured environment. She also needs a healthy diet to nourish her mind and body, and regular attention from supportive parental figures in order to develop a strong emotional backbone. Once a student has acquired confidence in certain neurological functions, she is prone to explore her boundaries and challenge the expectations of her teachers or caregivers, thereby assuming certain risks in and out of the classroom.[7]7 In order to accommodate a diversity of minds, schools need to be safe zones where children feel safe assuming certain intellectual risks without fear of judgment from their peers or penalty from their instructors.

[7] P. 318, A Mind At A Time, Levine © 2002, Simon and Shuster Paperbacks